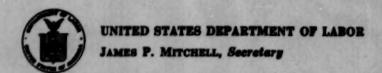
Monthly Labor Review

MAY 1955 VOL. 78 NO.

The CIO Conference on Automation
The United Auto Workers' 15th Convention
Strikes in 1954

UNITED STATES DEPARTMENT OF LABOR

BURRAU OF LABOR STATISTICS



BUREAU OF LABOR STATISTICS

ARTHES JOY WICKERS, Acting Commissioner

HERMAN B. BYER, Assistant Commissioner

HENRY J. FITSGERALD, Assistant Commissioner

CHARLES D. STEWART, Assistant Commissioner

JOHRPH P. GOLDBERG, Acting Special Assistant to the Commissioner

W. DUANE EVANS, Chief Statistician

DOROTHY S. BRADY, Chief, Division of Prices and Cost of Living
H. M. DOUYY, Chief, Division of Wages and Industrial Relations
Luon Greenwane, Chief, Division of Freductivity and Tushnological Developments
REMARD F. JOHRS, Chief, Division of Administrative Services
WALFER G. KERIC, Chief, Division of Field Service
PAUL R. KERICHARUM, Chief, Office of Frequent Planning
LAWRINGER R. KERIC, Chief, Office of Program Planning
LAWRINGER R. KERIC, Chief, Office of Program Indicates
H. E. RELEY, Chief, Division of Construction Statistics
ORGAN WHOLEAST, Chief, Office of Labor Resonances
BETMOUR L. WOLFERMS, Chief, Office of Labor Resonances
BETMOUR L. WOLFERMS, Chief, Division of Manpower and Employment Statistics

Regional Offices and Directors

NEW ENGLAND REGION
WESTPEL D. MACDONALD
18 Oliver Street
Doston 16, Mass.

Onnesticul New Hougehi Maine Hode Island Messechusette Verment MID-ATLANTIC REGION
ROSSE R. BURLOW
ROSS 1000
NOW York I, N. Y.
Deleuers New York
Marghand Pennsylvania
New American

SOUTHERN REGION

BRUNSWICK A. BAGDOS Room 664

Atlanta & Ca.

Arbenous Oblahoma Florida Bouth Caroli Georgia Transcess

Couldens Times

NORTH CENTRAL REGION

ADOLPH O. BESSES Tenth Floor 105 West Adams Street

Things 8, 111.

ndiena Nobracka reca North Dala Canana Ohio

Contucky Booth Dail Vickigon West Virg WESTERN REGION

MAX D. Komonso
Room 803
680 Sensome Street
San Pransisso 11, Calif.
Arizone New Mes
California Oragon
Colorado Dah

Idako Washington Montana Wyoming

The Munikly Labor Seview is for sale by the Superintendent of Denzament, U. S. Government Printing Office, Washington 25, D. C. Schmelyties price per year-01.25 densating 17.75 foreign. Price 25 cents a copy.

The printing of this publication has been approved by the Director of the Bureau of the Budget (October 22, 1962).

Monthly Labor Review

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS

LAWRENCE R. KLEIN, Editor

CONTENTS

Special Articles

519 Implications of Automation
519 Industrial and Economic Implications of Automation
524 A Theory of the Production and Service Processes
526 Integrating Automation into Our Economy
528 The 15th Convention of the CIO's Auto Workers
533 Earnings in Cotton Textiles, November 1954

Summaries of Studies and Reports

- 538 Analysis of Work Stoppages During 1954
 545 Union Contract Provisions for Paid Jury Leave
 547 Wages in Japanese Mining and Manufacturing
 552 Union Wage Scales of Local-Transit Operating Employees, 1954
 555 The Effect of Plant Size on Industrial Relations Practices
 557 Injury Rates in Manufacturing, Fourth Quarter 1954
 560 Railroad Retirement and Unemployment Insurance in 1953-54
 562 The Nation's Economic Prospects, 1955
- 562 The Nation's Economic Prospects, 1955
 564 Trends in the Development of Apprentice-Training Programs
- 532 Union Conventions Scheduled for June 1955

Technical Notes

Revised Standards for Work-Injury Statistics
 Machine Methods in Employment Statistics

Departments

- III The Labor Month in Review
- 570 Significant Decisions in Labor Cases574 Chronology of Recent Labor Events
- 576 Developments in Industrial Relations
- 581 Book Reviews and Notes
- 588 Current Labor Statistics

What Factory Workers Earn —

A new BLS Bulletin (No. 1179) reports on straighttime hourly earnings of factory workers. This major study provides countrywide and regional distributions of hourly rates for—

- All Manufacturing Industries
- · Durable Goods
- Nondurable Goods
- Men and Women Separately
- · Selected Industry Groups

The 7 charts and 13 tables include a comparison of wage rates since 1947.

Send your order, accompanied by check or money order, to any of the following BLS regional offices: New York, Chicago, or San Francisco (see inside of front cover for complete addresses), or to the Superintendent of Documents, Washington 25, D. C.

Identify as Factory Workers' Earnings (BLS Bulletin 1179).

Price, 25 Cents a Copy

The Labor Month in Review

THE AFL and CIO on May 2 released a draft constitution to govern the new, single organization to be formed next December. It follows closely the terms of the merger agreement announced last February. This cornerstone for the new trade-union center becomes effective after approval by concurrent conventions in New York City of the two parent groups and a joint convention early in December. No name has as yet been announced for the new federation.

(One interesting feature of the new constitution provides for the voluntary retirement of the president and secretary-treasurer upon reaching age 65 with 20 years' service. Time served as an official with any affiliated union of the AFL or CIO will be counted. Such retirees become officers emeritus of the organization at three-quarters pay of their successors.)

The constitution was a symbolic cornerstone for the amalgamation. There was also a real one laid when, at the end of April, the American Federation of Labor dedicated its new Washington headquarters building. Completion is expected in December in time to serve the new organization. President Eisenhower assisted in laying the cornerstone and spoke during the ceremonies. On May 5 the AFL Machinists also dedicated a new headquarters building a few blocks away.

One article of the draft constitution directs the executive council to resolve jurisdictional conflicts and duplications "through the process of voluntary agreement or merger." Several unions in this category were attempting to beat the gun. The AFL Butcher Workmen and the CIO Packinghouse Workers have been discussing merger, and there is some optimism as to success. The AFL union, however, aroused the disapproval of both AFL and CIO officials by amalgamating with the Communist-line Fur and Leather Workers several months ago. The CIO United Paperworkers, at its convention late in April, issued a strong statement proposing unity with the two larger

AFL unions in the field. Insurance unions of the CIO and AFL, both small, are holding unity meetings. William C. Doherty, president of the AFL Letter Carriers, has called for unity of all postal unions (there are 12 representing postal workers). These groups have been badly split in regard to Post Office pay increase bills before this session of Congress. The effort of the Teamsters to absorb the union of longshoremen the AFL had expelled in 1953 was halted by the Federation's Executive Council on constitutional and jurisdictional grounds. The Teamsters accepted the Council's ruling and announced intention to attempt merger with the AFL's internanational union in that field.

A 23-MAN delegation representing the AFL, CIO, and United Mine Workers left in mid-May for the World Congress of the International Confederation of Free Trade Unions scheduled for Vienna, May 20-28. The American group were pledged to support a boycott of goods produced by slave labor, aid to Tunisian and Moroccan workers, and United Nations regulation and inspection of atomic weapons, enforced by sanctions against violators.

The International Labor Organization Petroleum Conference in Venezuela came to an unhappy and sudden conclusion early in May when the Venezuelan Government deported the labor member of the ILO Governing Body delegation. The Conference thereupon withdrew from the country. The fracas in Caracas resulted from criticism of Venezuelan labor policy by the deported trade unionist. American union delegates had boycotted the meeting.

DESPITE the joint efforts of Governors of 13 Southern States, the strikes of Southern Bell telephone workers and employees of the Louisville and Nashville Railroad, both of which began March 14, continued throughout April and well into May, amidst numerous violent episodes. On May 9 the rail strike, longest major stoppage of nonoperating rail unions since 1922, was settled. Disputed issues will be determined by an arbitrator, Francis J. Robertson, Washington attorney. The telephone dispute continued between the CIO Communications Workers and Bell companies in nine States.

Northern textile workers affiliated with the CIO struck against a number of new England mills, including three of the areas' largest, in protest against proposed contract changes which would have reduced wages and certain fringe benefits. The union had sought renewal of present provisions. On May 2, a little over 2 weeks after the strike began, one company employing about 25 percent of the 23,000 participating in the strike signed a 3-year contract with no wage cut, contingent upon terms of the union's settlement with the remaining companies.

On April 27, the Railway Conductors, negotiating with all major roads for graduated rates of pay for brakemen and conductors, sent strike alerts to its general and local officials. A Presidential Board had examined the issues in the dispute but offered no specific settlement. The union wants wage rates determined by size and hauling capacity of locomotives.

IN THE crucial negotiations between the UAW-CIO and General Motors and Ford, there was no conclusive indication of any kind by mid-May as to how the parties would resolve the union's demand for a guaranteed annual wage. The union, on April 29, notified General Motors that it was terminating its contracts on June 7. This extends the contracts 9 days beyond the normal expiration date and 6 days beyond the expiration of the Ford contract.

One odd employment security clause was written into a contract between the International Resistance Co. and the CIO Electrical Workers. It established a union-administered unemployment insurance trust fund financed by employer payments of 9 cents an hour. Payments will not begin until April 1956, and if agreement cannot be reached by then on administrative details, a retroactive wage increase of 9 cents an hour will be paid.

The National Maritme Union (CIO) has notified shipowners that it too wants some form of employer-financed unemployment benefit written into its next contract. The present agreement expires June 15. The union announced that it is especially concerned about unemployed sailors, who fail to meet eligibility requirements for State unemployment insurance.

Elsewhere on the maritime labor scene, Harry Lundeberg, secretary-treasurer of the AFL Sailors' Union of the Pacific, took a dim view of the NMU proposal. Lundeberg proposes to cut crew size and amount of overtime on bulk-cargo ships to place American shipping on a more competitive basis with foreign freighters and ease unemployment in the industry by increasing the number of ships in service. This proposal was a major factor in breaking up a meeting of the Conference of Maritime Unions, composed of unions in the industry, which had been formed to coordinate collective bargaining issues and interests.

There was complete unanimity of American labor leaders in regard to changes in minimum wage legislation: they wanted \$1.25 an hour. The Secretary of Labor has testified before a Senate subcommittee in favor of a rise in the minimum from the present 75 cents to 90 cents, and urged consideration of extended coverage.

THERE WERE several significant legal developments involving union-management relations in April. The New York State Supreme Court ruled that loss of a job through refusal to join a union, in an employment relationship governed by a union shop contract, barred the employee from unemployment insurance benefits. The Court held that rejecting membership was a voluntary termination of employment.

The United States Supreme Court on April 11 upheld the National Labor Relations Board in the Whitin Machine Works case, in which the NLRB had ruled that an employer, to bargain in good faith, must, on request, furnish the names and wage rates of employees.

Under an April 26 consent decree involving a local of the AFL Teamsters and the New York State Commission Against Discrimination, 14 Negro complainants will receive seniority status as regular employees in the seasonal brewing industry.

J. Scott Milne, president of the International Brotherhood of Electrical Workers, on May 3 was elected to the AFL Executive Council to fill the vacancy left by the death of Daniel W. Tracy. The Council also announced the first grants from the William Green Memorial Fund, created in honor of the late president of the Federation. Ohio State University was given \$100,000 to support two undergraduate and two graduate scholarships annually.

Implications of Automation

Editor's Note.—In less than 2 years the term automation has evolved from a fairly simple designation of certain kinds of industrial processes to a symbol of a complicated, almost awesome way of industrial life. To help the reader place the facts of automation in understandable perspective, the Review, as in the February issue with publication of the paper by Professors Baldwin and Shultz, is excerpting recent manuscripts by informed commentators on the subject. The three which follow were read to the CIO Conference on Automation held in Washington, April 14, 1955. Suspension marks to denote unused portions of text have been omitted in the interest of easier reading. Requests for copies of the full papers should be addressed directly to the authors.

Industrial and Economic Implications of Automation

Automation, together with atomic energy, if properly understood, applied, developed and controlled, may provide the means for eliminating poverty for the first time in the history of the world. However, the economic implications must be carefully analyzed so that the mistakes of the first Industrial Revolution can be avoided and the benefits of this new technology more equitably distributed.

The concern of labor leaders over the possible consequences of automation has been widely misinterpreted as being a fear of science and invention. Hardly anyone is afraid of technological progress any more, but this does not mean that all innovations must be accepted uncritically. Every advance of progress has brought with it serious economic and social problems. The modern industrial economy combines insecurity with its high living standards, specialization with its high output, and anxieties and dangers with its limitless opportunities.

Potential Uses

Automation means a continuous and integrated operation of a production system using electronic equipment to perform routine functions and regulate and coordinate the flow and quality of production. It is already being used in many industries as either a supplement or substitute for conventional assembly line operations. The more spectacular uses of automation, particularly in taking over administrative functions and in integrating them with productive processes, remain for the future. However, there can be no question about the potential uses of automation. It is merely a question of time, possibly 5 years or less, before electronic control of business operations comes of age.

Those who understand both the principles of business procedure and electronic equipment are saying that computers will be able to use current sales forecasting analysis to adjust automatically and integrate the chain of interrelated operations such as management, planning, sales, supply, production, budgeting, and accounting. Models, in the form of electrical networks, can be constructed and studied by economists. Artificial disturbances analogous to assumed changes in economic variables can be employed to determine the consequences of alternate courses of action. enormous speed with which complicated problems can be solved greatly increases the possibility of experimentation within relevant time periods. On some business operations, computers can replace almost the entire work force.

The immediate effects in the plant are to substitute machinery for labor, set a continuous pace at which the plant must be operated, greatly increase production, and provide a more comprehensive and efficient system for information gathering and handling. The introduction of mass production methods at the beginning of the century had all of these effects and the result was a material alteration in the character of industry.

Automation is the logical conclusion of the process of mechanization, which is now over 200 years old. The first Industrial Revolution was a new technology based on new forms and applications of power; automation is a new technology based on communications and control. Yet, for the most part, the consequences are the same. Furthermore, while mechanization provided the economic basis for continuous, high-level production, automation adds a technical basis. Machines with instruments running them cannot economically be shut down. Thus automation carries to an extreme the presently known economic and social consequences of a mass-production technology.

The age of automation accelerates the need for greater comprehension and farsightedness on the part of both management and labor. For example, rapid changeover times and greatly decreased inventories require more alertness and greater technical knowledge of managers than ever before. Furthermore, as productive processes and factory layouts are changed, the problem of determining managerial responsibility may change. In some cases, automation may cause confusion of responsibility as formerly discontinuous, specialized functions are tied together in a continuous-flow process; in other cases, the improved communications system may make it easier to fix responsibility.

To determine how far automation can be applied to productive processes, industries can be divided into three classifications.

The first includes those industries in which production can be reduced into a continuous-flow process. Oil refining, flour milling, and chemical production are illustrations of industries in which automation should continue to make significant progress. In other industries it is possible to revamp the productive mechanism to convert it from a series of unit operations into a single endless process. While some industries utilize processes not conducive to automation, new methods of production may be conceived which are more acceptable.

A second class includes industries in which some automation is possible, but full or nearly complete automation is not likely. Indeed, it is possible that whereas some industries may have automatic machines applied to 75 percent of their operations, the cost of making the plant completely automatic would more than offset the savings achieved from partial application of automatic machines. In this category would be industries which require substantial information-handling and accounting functions, but in which the production method or the product is not adaptable to continuous-flow techniques. Such industries would include transportation, large-scale retailing, and the manufacture of certain nonstandardized consumer products like furniture.

The third group, into which all other industries may be classified, includes those in which the highly individualistic nature of the product, the need for personal services, the advantages of small-scale units, or vast space requirements preclude any significant application of automatic controls. These would include agriculture, mining, professional fields, and most construction and retailing.

The very high initial expense of automatic control systems may prevent their installation by small firms. Although the manufacture of all kinds of electronic control devices is expanding enormously, prices are not likely to be materially reduced for some time. The rapid rate of innovation in electronics and the continuous discovery of new applications of automatic control systems tend to postpone their mass production. Consequently, these machines tend to be designed for individual order and therefore production must occur under the most expensive conditions. However, computer centers such as the one established at Georgia Tech will soon make many services available to medium-size firms on a part-time, rental basis.

Effect on Industrial Operations

Although a sizable concentration of capital is necessary before a firm can achieve the economies of automatized operations, automatic control devices may lead to decentralization of plants. The growth of electric power transmission technology and the introduction of lightweight fabricating materials have already permitted plants to be located at great distance from power and supply

sources. Since automatic equipment requires little direct labor, there will no longer be any compelling need to locate automatic production plants near large population centers. Of course, decentralization of production may be accompanied by further concentration of ownership, if established firms take the lead in expanding into more remote areas. Decentralization of plants does not necessarily result in less concentration of market power. It may result in greater concentration.

Automation does not promise to create as much secondary investment as have some of the earlier developments in technology. The introduction of the automobile and the resulting increase in primary investment in that industry stimulated a wave of investment in the oil, rubber, and construction sectors of the economy. In this respect, automation probably will not make the far-reaching investment impression on the economy that the introduction of and later improvements in automobiles, railroads, and canals, for example, created. Therefore, any loss of purchasing power due to a lower payroll may not be offset by expenditures induced in other industries. Since the present industrial structure permits firms to reduce output and employment, rather than forcing them to reduce prices, when demand declines, it becomes necessary that fiscal policies not discriminate against lower income groups and that wages rise in proportion to increases in productivity. Otherwise, there is the danger that consumption will not keep pace with output.

Electronic computers increase the amount of knowledge, the accuracy of information, and the speed with which it is obtainable, thus giving management a much clearer picture of its overall operation. By making knowledge of the consequences of alternative courses of action readily available, business operations in the future can be conducted more rationally than in the past. Unprofitable operations or products can be more quickly discovered and credit managers will be able to follow the changes in financial ratios day by day. Collective bargaining and product pricing will be based on a greater volume of accurate information so that areas of controversy will be narrowed and conflicts based on misunderstandings of facts will decline.

Automation can be expected to affect the location pattern of industries in several ways. First, there may be a shift in labor-oriented industries. The attractiveness of low labor-cost regions could be reduced, perhaps to the point of elimination. This can occur for two reasons. First, the number of workers in the automatized plant is considerably reduced, thereby lessening the savings to be gained from employing cheap labor. Second, the automatized labor force is primarily constituted of skilled labor and there is usually a smaller wage differential between the skilled employees of different regions than between the semiskilled and unskilled workers.

A second effect of automation on the location of industries is due to the possibility of an accelerated rate of obsolescence of equipment. There is an increased likelihood of abandonment of plants and the creation of depressed areas. If one large firm adopts automatic operations, other firms in the industry may have to scrap or sell undepreciated machinery and adopt similar techniques or be squeezed out of the industry by the lower costs of their automatized rivals.

Entire communities could become ghost towns if this happened and although there should be no long-run attempt to freeze existing industrial patterns, nevertheless some kind of direct assistance may become necessary to mitigate the most acute hardships in such distressed areas. Some of this aid could come by requiring the firms which are seeking lower cost locations to bear a larger share of the social costs of their operations. For example, the costs of moving workers and their families, earlier retirement under pension plans, increased unemployment pay, and retraining programs should be borne largely by the firm. Industries composed of large and expanding firms could guarantee annual wages. Other costs would have to be borne by the government. For example, a greatly expanded free employment service would facilitate mobility and reduce frictional unemployment. Public works projects in distressed locations would provide jobs which would generate the purchasing power necessary to sustain business,

Third, automation is likely to affect location and operations by causing a substitution of process methods of production for job methods. Thus there may be more emphasis on the use of gases, liquids, electric power, and pure compounds and less emphasis on natural products, crude mixtures, and solids, since the latter are less adaptable to the flow of automatic processes. This may result in the displacement of large numbers of workers, many of whom have long experience, seniority rights, and low mobility. A need may arise here to induce multiplant firms to provide transfer rights among their various operations. Furthermore, as firms adopt automatic process types of operations the necessity of constant production arises.

Effect on the Labor Force

In the past, as machinery has replaced men in production, energy has been released which was partly absorbed by an expansion of employment in travel, entertainment, and personal services. Automation should accelerate this process. Mechanization has also created capital surpluses which were partly employed in activity which led to further accumulation of wealth. Cumulative benefits have tended to accrue to those firms with excess capital. Automation, too, promises to reward the wealthier firms.

Although the rate and extent of unionization probably will not decline directly as a result of automation, there will undoubtedly continue to be a relative expansion of employment in the service activities, a large proportion of which have been resistant to union organization in the past. While there is still considerable room for organization of production workers in the economy, this shift in the employment pattern suggests a possible expansion of areas which are more difficult to organize. For example, total employment has risen considerably since 1948, but employment in the increasingly automatic oil refining industry (which is highly unionized) has fallen from 147,000 to 137,000 since that time, although refinery production rose 22 percent. Several other basic industries have witnessed a decline of production workers and a great increase in engineers and technicians already.

Mechanization in general and automation in particular have three consequences for the demand for skilled labor. First, some existing skills will be rendered obsolete. Second, some existing skills will be diluted by a further division of labor. Third, there will be a demand for new skills, usually of a higher order. This last effect seems likely to predominate, so that the overall result will be to replace lower skills with higher ones.

However, the net effect on individual workers is likely to be a downgrading unless they can be retrained. So far automation has not caused any significant overall unemployment, because skilled workers have been retrained in temporary or less skilled jobs. This kind of "hidden unemployment" is often overlooked in the total employment statistics.

Thus automation, unlike mechanization in general, results in long-run upgrading of the labor force as routine and uninteresting jobs are eliminated and more responsible and challenging jobs are created. There will be an increase in the demand for highly skilled maintenance men, for example, and the ratio of managers to employees will probably increase because of the increased value of the equipment and the increased scope of the work process under any one manager's supervision.

But these new jobs require more education and training. The already critical shortage of engineers, for example, is bound to get worse unless business firms can become aware that it is in their own economic self-interest to endow colleges and universities and provide more scholarships for the many deserving young people who cannot afford to go to college.

Perhaps the most widely discussed economic effect of automation has been technological unemployment. Fear has been expressed that the greatly reduced labor requirements of automatic factories will lead to a persistent shortage of job opportunities in the economy. As an economywide problem, this argument may be overdrawn for several reasons. First, automation will probably be limited to industries which employ at the most 25 percent of the labor force, yet this is the most highly organized sector. Second, automatic controls do not replace the labor force entirely, although in terms of labor hours there is a considerable saving. As routine clerical and operative jobs are abolished, new maintenance and technical jobs are created which go far toward offsetting the loss of former jobs. Third, extensive training and educational programs will be required as the labor force is upgraded and these will to some extent counteract unemployment by delaying entry into the labor market.

In spite of these mitigating factors, however, the severity of technological unemployment on the individuals affected cannot be underestimated. Those who disparage fears of technological unemployment often assume the existence of a self-adjusting labor market. However, there is a real danger that imperfections in the labor market will seriously delay absorption of the displaced workers.

The barriers to labor mobility have always been great, but even in the face of increasing concentration of capital it is likely that labor is more mobile and flexible today than ever before. Cheap transportation, improved communication, and the disintegration of family and community ties which specialization and industrialization have encouraged, all tend to make for labor flexibility among firms in the same industry or firms offering similar jobs. However, movement among occupations, particularly to more highly skilled jobs, entails great costs which individual workers cannot normally bear. Yet this is exactly the kind of mobility which automation will require.

It is not necessary that all workers be equally sensitive to changes in the demand for labor or differences in opportunities. A highly mobile minority in each occupational group will usually preserve the necessary flexibility of supply except where there are structural changes taking place such as automation may produce. The individual rewards for mobility, and penalties for immobility, seem likely to increase. This will favor young, aggressive workers with few family responsibilities

and discriminate against older, more settled workers.

There is no reason why labor should be more mobile, flexible, and willing to assume the enormous risks of economic dislocation than the other components of production—capital, management, and natural resources—which are to varying degrees organized, concentrated, and immobilized. Indeed, sacrifices made by other factors of production in participating in a competitive market are ordinarily much less than those made by labor. The possible loss of a speculative profit or, at most, the loss of an investment which businessmen, bankers, or property-owners may suffer is usually not as severe a personal hardship as the loss of livelihood to a worker.

In summary, the long-run, overall outlook for labor as a result of automation is good. However, the short-run, specific problems of expensive geographical movement, loss of seniority, obsolescence of skills, and so on may be acute. Therefore, there may arise a more urgent need to reduce frictional unemployment and provide guarantees against general unemployment. These cost little if the general unemployment doesn't arise and may save billions in lost production and untold human misery if it does.

-WALTER S. BUCKINGHAM, Jr. Georgia Institute of Technology

A Theory of the Production and Service Processes

TECHNOLOGY has made a great contribution to both labor and management by demonstrating that mathematical foundations exist which are capable of explaining how materials can be processed and information used and stored. The mathematical concepts now being tested will yield a theory of the production process and a theory of the service process. Combined, they will provide a theory of the business process.

The processes which man uses have developed gradually. Changes have been evolutionary rather than revolutionary. Continuous improvement of the processes and continuous experimentation in how to join them to form complex manufacturing and service systems represent the growth pattern.

Increase in the size of our business operations has also been evolutionary. At first, processing operations involved only a single step or relatively few steps. Today we have entire sequences or systems of operations which consist of the procurement of raw material, the manufacture of goods, and their distribution and sale.

Basically, production is the handling of materials and service is the handling of information. Business is made up of combinations of these two. In fact, a measure—an informational state—can be associated with every quantity or quality that describes the goods we make or the work we do. This last point is a very important one. It is the basis for our being able to establish a mathematical theory which explains and describes the behavior of the production and service processes in terms of their materials-handling and information-handling capacity.

Testing the New Technology

The new technology is no different from the old. The ideas which germinated and came to fruition nearly 15 years ago, as we defended ourselves against aggression, are now available as a constructive, peacetime dividend on our effort. Technology results from proved scientific ideas—not speculation. Technology puts into practice those scientific ideas which are sound. In the production and service processes it must stand a severe

test: Innovations must be those which men can learn to use and be willing to use—innovations which make possible greater productivity per unit of effort, greater service per unit of effort, and better quality of production and service. A large amount of proved knowledge exists about human operators, automatic control, communications, and computation. We should test it.

Today, when everyone wants to make everything automatic, a quantitative approach is needed. The quantitative method means to go into detail, to obtain numbers, to use measurements and accurate data for the planning of design. This is in contrast to a qualitative approach, which merely uses ideas that may be correct but which are not supported by numerical evidence. The quantitative approach gives answers; the qualitative approach only indicates that answers may exist.

We must make thorough studies in order to design a highly automatic process or plant. More is needed than the construction and assembly of equipment which works without machine tenders or with only a small group of tenders. Automation follows logically after rigorous investigation of the production and service operations has shown that they are worth making automatic. There is no need for guesswork in considering automatic factories or automatic offices. A quantitative approach to the problem will show when they are economical and when they are not.

W caen look upon production and service operations as systems of individual operations joined according to a well-organized pattern. An organizational pattern lies behind every present-day production, service, and business operation. In fact, the same business operation can often be carried out successfully and competitively by more than one organizational plan.

The organizational pattern, the cause-andeffect relationship in materials handling and information handling, gives us the possibility of
measuring production and service system performance. We can compare actual performance
of an operation with its theoretically maximum
possible performance. We can decide what portion of the system needs improvement in order to
bring it up to par with the others. Or we can
decide that the whole organizational plan is out of
date and needs replacement.

Dynamic Behavior

Processes never operate in a condition of equilibrium. They are continuously disturbed and are continuously manipulated and corrected against these disturbances by either manual or automatic action. Their action is dynamic. The rapidity with which they recover from disturbances and the speed with which they can shift from one condition of action to another, measure how good they are. The speed of materials handling and the volume of information handling which indicate the productive capacity and the efficiency of our present-day operations are determined by their organizational pattern and their dynamic nature.

Dynamic systems can be unstable. They can get out of hand and oscillate. Much has been learned about the stability of dynamic systems in the last decade or two in the fields of servo-mechanisms and military fire control. The causes of instability can be recognized. These are principally the momentary delays in the handling of information—the so-called "time lags" and the "noise" which "jams" our communication system. Instability can also result because of the improper manner in which one process is connected with another. There are procedures that tell us how to prevent oscillations from this cause.

Control

Automatic control is not something new. Processes have been controlled automatically since 1900; in fact, since the middle 1800's. And if one wanted to be very accurate, the ancient kings had automatic toys 2,000 years ago. Sometimes processes are so simple that a single man can do all the controlling that is necessary; others are so complicated that they require an entire working force of men and machines to manipulate them. In fact, there are many different varieties of control. Control may be manual without the aid of special machinery. It may nevertheless be automatic in the sense that a man continually monitors a process and makes it do what he wishes it to do. Automatic equipment may be in action, but may respond to a human supervisor. Then again, some processes may be fully automatic. Control always involves measurement, communication, decision, manipulation, and process response to both manipulation and disturbance.

When the requirement for control over any operation exceeds the dynamic response of the man, the automatic machine must be given to him as a tool. Doubtless you have heard about "computer control." By this, people imply that the computing machines will run our plants and factories. In time, this could be so; but there is one important fact to note. A computer will do only what it is programmed to do. Its principal ability is to carry out complicated arithmetical and algebraic operations at high speed. It can do in a very short time calculations that take a man a long time to execute. Therefore, the computer will simply become an adjunct to the plant operator or supervisor.

Since the demand for automatic control will increase, we shall need components in great variety and number. New mass-production industries will be needed for this production. An important point to recognize is that automatic control equipment is precise equipment. It is more difficult and more costly to make such equipment than it is to make much of our consumer goods. Control and computer components are sometimes so tiny that they have to be made by special machines.

When we speed up production and increase information-handling capacity, it is very important not to have a plant shut down for more than a very short time. Otherwise, material may pile up or information may exceed storage capacity. Supervision of plant control will be a job that requires skill, quick thinking, and thoroughness. Maintenance crews will have to work decisively and rapidly. There will be no time for muddling through. This calls for men especially trained in the modern ideas of how to maintain precise equipment. It may be necessary to set up training programs or schools of "applied technology" to train the necessary working force in the maintenance of the new automatic machinery.

The introduction of highly mechanized and automatic equipment in our plants and offices will give the people who are willing to accept them and use them greater productive capacity, better competitive position. The new technology is not confined to the United States. It is available for the whole world to use. Whether or not we use it, it is certain that somebody will.

-DONALD P. CAMPBELL Massachusetts Institute of Technology

Integrating Automation into Our Economy

THE INDUSTRIAL REVOLUTION was revolutionary in the broadest possible sense of the word. It created a whole new environment for mankind—a whole new way of life. If we are going to apply the word "revolution" to automation, we must be very careful how close we draw the analogy or we are likely to find that we have created more confusion than understanding.

To some, automation seems nothing more than mechanization. It is a label that is applied to anything automatic, or even semi-automatic. To others, it conveys a sense of robots; of machines that think and will eventually take over all of man's functions. To still others, it connotes that panacea for all our troubles culminating in the 7-day weekend.

Two Kinds of Automation

My most usual way of avoiding the dilemma of definition is to explain that automation has two quite distinct meanings. On the one hand, we have what I like to call "Detroit automation," or advanced mechanization. On the other, we have the growing use of automatic feedback control. Intelligently pursued, both avenues of development can lead to highly automatic operation. Both approaches are technologically and economically significant, and both are certainly worthy of much consideration and analysis.

The areas of application of Detroit automation are quite clear. It is generally limited to long runs of identical product. To some extent the length of run requirement can be mitigated by clever design of both machine and workpiece, but Detroit automation is fundamentally a long-run production method.

It is a natural outgrowth of both the production line and the machine tool. The essential characteristic of Detroit automation is the integration of machines with one another.

In the Cleveland and Buffalo plants of the Ford Motor Co., electric and hydraulic controls permit the loading and unloading of special purpose multistage machine tools, while large transfer machines provide for automatic movement of workpieces from one operation to the next. During the past few years this type of automation—whose development can be traced through at least 150 years of evolution—has become common in the automotive industry, and has spread to other areas of the metalworking, electrical and electronic, meatpacking and food-processing industries. Wherever repetitive operations are to be performed over long runs of product, Detroit automation stands a good chance of application.

The key quality of the second kind of automation—the feedback—is self-regulation. While the first Industrial Revolution provided machines that lightened man's toil, it is the technology of feedback in today's Industrial Revolution that is providing machines that perform the functions of control.

Here we have a whole new technology which permits the automatic manufacture of short as well as long runs of varying product. This second type of automation thus breaks through the limits of mechanization and extends the benefits of automatic production to the job shop. Since by far the largest proportion of this country's production is in the form of job shop runs, the ability to produce these short runs automatically is a very important accomplishment.

But the application of feedback is even broader than is implied by this fact alone. The essence of feedback is the handling and control of information. Since this information may refer to tool movement on a lathe, or a liquid flowing through a pipe, or a file in an insurance office, the application of this kind of automation is very wide.

Perhaps the least talked about but most significant aspect of the technology of feedback is flexibility. For example, by using the principle of feedback in machine tool control, we obtain the flexibility necessary to machine pieces with varying specifications automatically yet economically. Conventional automatic machine tools are controlled by mechanical devices, such as cams or levers. They cannot change from one product specification to another without costly and extensive adjustments and can, therefore, machine automatically only long runs of identical products.

In a consumer economy as dynamic as ours, the shop that is wedded to one product because of heavy machine investment soon finds itself in an untenable position. Special-purpose automatic machines enable it to produce at low cost, but they are incapable of producing a variety of products and rust long before they are paid for, except when used in those industries having substantially stable demand for their products. It is this very situation that feedback automation now promises to alter. Through flexible automatic control, machines can be made more versatile as well as automatic.

The Economic and Social Setting

Automation has already produced a new industry in America. There are more than 1,000 companies engaged wholly or partly in the manufacture of automation equipment. Their aggregate output last year totaled more than \$3 billion.

Automation can make economical many products which currently cannot be produced. The chemical companies, such as the petroleum companies, would not be able to control many of their split-second reactions, and we would be without many new products were it not for feedback control. A whole line of precision products—which would be hopelessly costly if manufactured with human supervision—suddenly became worthwhile under automatic supervision.

Too often we speak of automation and the speed with which it is being incorporated into our economy; we find ourselves hoping that this will be a slow transition—a gradual integration. This is likely to be the case, but, in actuality, I suspect we ought to be thinking in terms of speeding it up rather than slowing it down.

It would of course be foolish for me to contend that automation is not without its growing pains. For any of us to minimize the widespread social and economic effects that automation is sure to bring would be to close our eyes to a fact that is already part of everyday life.

While it is obvious that in the long run automation will be of tremendous benefit to us all, it is the short run that worries most of us. Despite the fact that in today's Industrial Revolution the new jobs are being created before the old ones are destroyed and that the pressure will be on us to simply hold our own with a smaller percentage of our population in the work force, there still exists the danger that temporary dislocations of personnel will occur in some cases. We should begin planning for this now.

From the long range point of view, it is probable that automation will be responsible for a new type of labor force. In our dynamic economy with its ever-increasing needs, there is no set number of jobs, but rather a constant shifting of kinds of jobs. The implication of such a shift for retraining of workers is an important challenge facing both organized labor and management.

It strikes me that much of the concern over adverse labor effects of automation is due to what I call "obituary accounting," i. e., totting up the number of workers replaced by a machine, multiplying that sum by the number of machines, and tagging the end result "unemployment." This practice assumes that only a set number of jobs exist in our economy and ignores the fundamental fact that our needs increase continually. To ignore this fact is to sell short the marvelous capacity for growth and production that has been at the heart of American industrial expansion.

—John Diebold & Associates, Inc.

The 15th Convention of the CIO's Auto Workers

THEODORE ALLISON*

A KEEN AWARENESS of imminent contract negotiations with Ford and General Motors pervaded the 15th constitutional convention of the United Automobile, Aircraft and Agricultural Implement Workers of America (CIO), meeting in Cleveland from March 27 through April 1. Of primary concern were the demand for a guaranteed annual employment plan and the collection of a \$25 million strike fund through a \$5 monthly dues increase to strengthen the union's bargaining position.

Delegates also gave considerable attention to other trade union objectives. The proposed AFL-CIO merger was warmly endorsed. Intensified efforts to organize the unorganized were urged. Broad social and economic goals were set forth, to be achieved not only through collective bargaining but through political action.

Approximately 3,000 delegates represented the members of what UAW President Walter P. Reuther hailed as "the largest free trade union in the world." Dues-paying membership averaged 1,239,171 in 1954. Inclusion of members in good standing but excused from paying dues, such as those laid off or on strike, would bring the membership total to about 1½ million.

Keynote Address of President Reuther

In his opening speech to the convention, President Reuther referred to the forthcoming 1955 negotiations as "historic":

This is a crusade to gear economic abundance to human needs. . . . We are on the threshold of revolutionary technological development with the use of atomic power, with automation. . . . Machinery is taking tremendous steps forward in terms of creating greater and greater abundance with less and less manpower required.

We are in trouble . . . because of the growing and serious imbalance between our ability to create wealth with our tremendous productive power and the inability of millions of families to consume that abundance because they lack adequate purchasing power. [The guaranteed annual wage is one of the basic economic tools that free people need to use to bring about this dynamic balance between greater productive power and greater purchasing power. Nothing breeds unemployment like unemployment. . . . The guaranteed annual wage is an important move in achieving full production and full employment in peacetime. . . . When we fight for the guaranteed wage, we are not trying to be paid for not working. We just don't want our people to be penalized when they haven't got a job through no fault of their own. . . . Basically what we are trying to do is to create the economic incentive so that management will be forced to make a plan for full production and full employment.

Alluding to the proposed dues increase, President Reuther said that "when we take steps to raise a defense fund of \$25 million we aren't preparing for a strike, we are just preparing to defend ourselves if we are forced into a strike. We are preparing to negotiate from strength."

The union leader enunciated the principle that bargaining demands should be economically sound, morally right, and socially responsible. He went on to say "the guaranteed annual wage is not only a matter of economic justice to the worker, it is a matter of economic necessity to our whole economy in the effort to achieve full production and full employment." Moreover, "if it is morally right to meet the cost of modern industry, pay your taxes by the year and your interest on these investments by the year, your executive salaries by the year, then we say it is morally right to pay the workers by the year."

Placing his theme of guaranteed employment as a stimulant to the full utilization of technological developments in a global perspective, President Reuther said: "We now have the opportunity and the new revolutionary force in the world which makes the Communists arch reactionaries. That is the revolutionary power of economic abundance. We now have the opportunity of working together with free people everywhere in creating and sharing economic abundance. . . . If we gear our future to economic abundance, then we can . . . give the free world a margin of superiority which the Communists will never match."

^{*} Of the Bureau's Division of Wages and Industrial Relations.

Collective Bargaining Objectives

Earlier conventions, notably those in 1951 and 1953, had designated the guaranteed annual wage as the union's next major collective bargaining goal. The plan endorsed by the 1955 convention was developed by the UAW-CIO National Economic and Collective Bargaining Conference last November following comprehensive study. However, in the resolution passed by the convention it was stated that the union was prepared to consider other guaranteed employment plans and was not irrevocably committed to this specific proposal.

Briefly stated, the plan-to be jointly administered-provides a guarantee of 40 straight-time hours of work or pay for each worker every week in which he is called in or for which he receives no prior notice of full-week lavoff. In addition, for workers who have seniority status a guarantee would be provided against full-week layoffs up to a maximum of 52 consecutive weeks, calculated on the basis of 1 week's guarantee for every 2 weeks' employment from the date seniority is acquired. Guarantee payments to a worker would be reduced by an amount equal to the State unemployment compensation benefits he receives. It is proposed that the employers finance the guarantee plan on both a pay-as-you-go and a reserve trust fund basis, with maximum liability limited to a specified percentage of current payroll.

Other gains sought in 1955 were also advocated as a means of strengthening the economy by increasing consumer purchasing power. These included a wage increase, an increase in retirement and disability pension benefits, and a broader employer-financed health security program. The union also demanded time and one-half for Saturday as such, double time for Sunday, and triple time for holiday work. To justify an increase in the annual improvement factor, rapid technological advances and resulting increases in productivity were cited. The concept of the 5-year agreement was scrapped in favor of contracts limited to no more than 2 years, to allow the union greater freedom of action to meet changing conditions arising from technological developments. Concern over plant migration and mergers as well as technological displacement prompted the union demands that (1) workers in a multiplant corporation be allowed to move with their jobs and transfer their seniority rights when work is moved from

one plant to another and (2) workers displaced from other plants of the same company or of other companies in the same industry and area be given preference in hiring.

The union reaffirmed its opposition to all forms of speedup and the introduction of incentive or

piecework plans.

In a resolution calling for study of the implications of the new technology and constructive planning "to utilize automation for human betterment," the union placed the shorter workweek at the top of its agenda for future negotiations after the guaranteed wage has been won.

In discussing the 1955 demands, Vice President John W. Livingston, director of the union's General Motors Department, expressed confidence that the union would not be required to "take any backward step" in achieving these demands and called the dues increase to build up a strike fund "the most important action our convention has ever taken with respect to collective bargaining."

Strike Fund

The increase of monthly membership dues from \$2.50 to \$7.50 evoked more debate than any other subject which came before the convention. Approved by an overwhelming majority, the increase is to remain in effect until a \$25 million international union strike fund is accumulated. At this point, dues are to revert to \$2.50 a month. Should the strike fund fall to \$20 million, dues are to be increased to \$3.50 until it again reaches \$25 million. Workers whose gross earnings are less than \$200 a month will be granted a \$2.50 rebate from the \$5 increase. The constitutional requirement that local unions earmark 5 cents from each member's monthly dues for a local strike fund was eliminated. Although primarily for use in supporting UAW strikers, the international's fund may be used to assist members of other unions engaged in strikes of major consequence to the labor movement.

Opposition to the dues increase voiced in debate indicated a divergence of interest between the large locals, with contracts in the transportation equipment and farm implement industries, and the smaller locals in industries and areas with relatively lower wages. Delegates from the latter group of locals claimed that the dues increase

would put too heavy a load on their members' budgets. Representatives from the South, where union security provisions are generally weak, feared that higher dues would make it more difficult for the union to retain its members and attract new workers. Moreover, there was a feeling on the part of some delegates that members in small plants were less likely to win guaranteed employment than were workers in the auto industry.

Considerable discussion centered about the method of distributing payments to strikers. A majority voted that benefits be distributed on the basis of individual need. Many delegates, however, advocated equal payments to all strikers, on the basis of right. Secretary-Treasurer Emil Mazey pointed out that the \$25 million fund would be inadequate to give assistance on this basis if a prolonged work stoppage should develop at one of the major auto companies. Data were developed to show that if, for instance, General Motors' 325,000 unionized workers were to go on strike, weekly benefits of \$20 would exhaust the fund in less than 4 weeks. A committee is to be established by the union's executive board to study development of a larger strike fund on a long-range basis.

Carl Stellato, president of local 600 at the Ford River Rouge plant, was a vocal supporter of distribution on the basis of right and advocated accumulation this year of a strike fund much larger than \$25 million by combining financial forces with other CIO and AFL unions. In reply, President Reuther pointed out that he had worked for a united labor movement defense fund for 10 years, but such a program was contingent on achievement of labor unity.

Labor Unity

Unity in the trade union movement was dramatized by the appearance of President George Meany of the American Federation of Labor. This was the first time the head of the AFL had appeared before a CIO union convention. President Meany outlined major features of the AFL-CIO merger agreement, stressing that the new federation should be free of discrimination, alert to the threat of communism, and characterized by high ethical standards. He called for practical common sense to solve jurisdictional problems. These sentiments were echoed by Walter Reuther,

who also advocated a joint organizational fund to be made up of contributions from all unions. The convention adopted a resolution endorsing the AFL-CIO merger and authorizing contribution of up to \$1 per member from the UAW treasury to a United Organizing Fund, providing other unions also participated. The hope was expressed that energies previously dissipated in raiding activities would be channeled into drives to organize the unorganized.

Organizing and Strike Activities

During the 2 years ending January 31, 1955, organizing drives were made by the UAW in 551 plants or units and were successful in 341. Bargaining rights for more than 60,000 workers were won.

In future organizing campaigns, runaway shops will be primary targets, it was stated. In the report of the Competitive Shop Committee, intensified organizing efforts were also urged among the following: employees of small parts and supply plants within the aircraft industry, agricultural implement workers remaining outside the UAW, workers in die casting and tool and die shops, and unorganized clerical and technical workers in plants where production workers are presently represented by the UAW.

The convention went on record in support of members on strike, pledging "every legitimate kind of assistance." This action was related particularly to the strike at the Kohler Co. of Sheboygan, Wis., which was in its twelfth month at the time of the convention. This stoppage was repeatedly referred to in discussion from the floor as an example of the solidarity of UAW members.

Political Action

In his keynote address, President Reuther urged the delegates not to rely solely on collective bargaining as a means of achieving labor's objectives, but to engage in political action. George Meany bluntly acknowledged trade unionism as a political force when he said, in referring to the proposed labor merger: "Fears have been expressed that there will be too much power, too much concentration of power, that it might be used politically. Well, in my book it will be used politically. Not with the idea in mind of running the country,

. . . but . . . of getting for American labor the fair share of that which we produce."

Most of the resolutions adopted by the convention called for some sort of political action on the part of union members, and one was devoted specifically to encouraging such action. Another listed 27 legislative issues of particular importance; many of these were spelled out in greater detail in separate resolutions.

Labor Legislation

The Taft-Hartley Act remains the legislative bête noire of organized labor. Apparently abandoning hope of early repeal, the UAW attacked principally on two related fronts, urging drastic amendment and a halt to what the union characterized as the "subversion" of the act by the "management-minded majority" of the National Labor Relations Board.

Increased social security benefits, the extension of benefits to workers immediately upon their becoming disabled, and comprehensive health legislation (including national health insurance) were proposed.

National systems of workmen's compensation and unemployment compensation were urged. Pending their establishment, several changes in the existing programs were recommended. Uniform industrial health and safety codes, to be administered by a Federal agency, were also suggested.

Economic and Social Aims

The convention adopted resolutions dealing with broad economic policies covering a wide range of subjects. These included revision of tax laws to strengthen consumer purchasing power, restoration of 90 percent price supports for basic farm crops, expanded public works and housing programs, the development of low-cost electric power from atomic sources, and conservation of natural resources.

The convention reaffirmed the CIO position that voluntarism rather than compulsion should prevail in programs of national defense and mobilization. Expanded aid for veterans was advocated.

Resolutions on three social issues—segregation and racial discrimination, juvenile delinquency, and job security and equal pay for women—aroused considerable discussion. Participation in community health and welfare agencies by local unions was commended. In other actions, the convention encouraged the establishment and use of credit unions, proposed increased Federal aid for public schools, and favored a more liberal immigration policy and increased technical and economic aid for underdeveloped countries as a weapon against communism.

Intraunion Political Activity

Although the intense factionalism which marked UAW conventions from 1936 to 1947 was absent in this gathering, the political nature of union structure was visible. As one delegate remarked in debate on the dues increase, "We are all politicians. We run for [union] positions. . . . If we were not politicians we wouldn't be here."

In convention proceedings, democratic forms were jealously guarded, with equal debate time allotted to both sides on any question about which delegates differed. The convention endorsed the Statement on Ethical Practices and Democratic Rights adopted by the 16th convention of the Congress of Industrial Organizations in December 1954, which included this principle: "The power of the organization derives ultimately from its membership, whose will, democratically expressed through the established rules of the organization, is the final union authority."

An informal vote tabled an administrationbacked proposal to require local unions to hold elections only once every 2 years rather than permitting them either annually or biennially.

In the election of officers, little opposition to the incumbent administration developed. President Walter P. Reuther and Secretary-Treasurer Emil Mazey were reelected. Two additional vice-presidencies were created by convention action, raising the number of such posts to four. A six-way race developed, but the Reuther-supported slate—Richard Gosser, John W. Livingston, Norman Matthews, and Leonard Woodcock—won handily. In filling the 19 positions on the executive board, 5 replacements were made.

¹ See The Sixteenth Annual Convention of the CIO, Monthly Labor Review, February 1985 (p. 183).

⁹ Kenneth Morris and Kenneth Robinson were elected to replace Matthews and Woodcock, respectively. George Merrelli filled the vacancy left by the death of Michael Lacey. Charles Bioletti and Norman Seaton were also new to the board.

Convention Visitors

Observers from at least 12 countries in the free world attended the convention. Fidel Velazquez, General Secretary-Treasurer of the Confederation of Mexican Workers, and A. R. Mosher, President of the Canadian Congress of Labor, addressed the convention. Other speakers, in addition to George Meany, included U. S. Senator Matthew M. Neely of West Virginia and Thurgood Marshall, chief legal counsel for the National Association for the Advancement of Colored People.

Union Conventions Scheduled for June 1955

Juna	Name of organization	Place
1	Independent Union of Plant Protection Employees in the Electrical and Machine Industry, Ind.	Lynn, Mass.
6	American Flint Glass Workers' Union, AFL	New York, N. Y.
6	American Federation of Musicians, AFL	Cleveland, Ohio.
6	United Wall Paper Craftsmen and Workers of North America, AFL.	New York, N. Y.
13	Office Employees International Union, AFL	Do.
13	Switchmen's Union of North America, AFL	Buffalo, N. Y.
14	International Glove Workers' Union of America, AFL	Marinette, Wis.
20	Brotherhood of Maintenance of Way Employees, AFL	Detroit, Mich.
20	Retail Clerks International Association, AFL	New York, N. Y.
20	Boot and Shoe Workers Union, AFL	Do.
20	Communications Workers of America, CIO	St. Louis, Mo.
27	Fabricated Metal and Enamelware Workers Council, AFL.	Milwaukee, Wis.
27	International Brotherhood of Operative Potters, AFL	Miami, Fla.
27	American Newspaper Guild, CIO	Albany, N. Y.
June	State conventions	Place
3	South Dakota, AFL	Mitchell
13	Idaho, AFL	Pocatello
21	Maine, AFL.	Old Orchard Beach
27	Missouri, AFL	Jefferson City
27	Texas, AFL	Dallas

Earnings in Cotton Textiles, November 1954

L. EARL LEWIS*

COTTON-TEXTILE production workers averaged \$1.19 an hour, exclusive of premium pay, in November 1954, according to a study of the Bureau of Labor Statistics. Men, accounting for 60 percent of the 330,000 workers employed in regular textile operations through the clothroom, averaged \$1.21, as compared with \$1.14 recorded for women workers. In the Southeast region, the average of \$1.17 an hour was the same as that recorded in a similar study made by BLS in March 1952, while in New England, the average dropped 6 cents from the March 1952 level of \$1.38.

Approximately 4.4 percent of the cotton-mill workers earned less than 90 cents an hour in November 1954; 14 percent earned less than \$1; and 67.4 percent, less than \$1.25 an hour.

Occupational pay levels were generally higher in New England than in the Southeast; for example, women spinners and weavers received 13 cents more; men janitors 12 cents more; and men loom fixers and weavers 15 and 20 cents more, respectively.

Paid vacations were provided to nearly all workers after 1 year of service. Life insurance and various types of health insurance benefits were also available to a majority of the workers. As a rule, these wage supplements were more frequently found—and were generally more liberal—in New England mills than in those in the Southeast.

Industry Characteristics

Approximately 353,000 production workers were employed in cotton-textile mills within the scope of this study, which included yarn, thread, and broad-woven fabric mills having 21 or more workers.⁴ About 87 percent of the workers were employed in the Southeastern States (table 1). New England employed another 9 percent, and mills in the Middle Atlantic and Southwest regions accounted for virtually all of the remainder.

The November 1954 employment level was nearly 10 percent lower than that recorded in March 1952 and 15 percent below the postwar level in early 1946. This general decline in employment has not been accompanied by a corresponding decline in production.⁵ The loss of employment has been proportionately greater in New England than in the Southeast. Between March 1952 and November 1954, employment in the Southeast declined approximately 7 percent, whereas in New England employment fell 20 percent during this period.

Integrated mills—those having both spinning and weaving operations—employed three-fourths of the millworkers in the Southeast and an even greater proportion in New England. Yarn mills are concentrated, for the most part, in the Southeast region, where 22 percent of the employment was in mills exclusively engaged in the spinning of yarn. Mills weaving fabrics from purchased yarn accounted for only about 2 percent of all textile workers.

New England is principally a producer of fine goods made of combed yarn. The Southeast, on the other hand, produces a much larger proportion of carded-yarn fabrics, including coarse- and medium-yarn sheeting, print cloth, colored-yarn fabrics, toweling, duck, and napped fabrics. The

^{*}Of the Bureau's Division of Wages and Industrial Relations.

¹ The earnings information presented in this report excludes data for approximately 23,000 workers employed in bleaching, cloth dyeing and finishing, and fibricating departments. Ninety percent of these workers were employed in the Southeast and averaged \$1.23 an hour; workers in New England averaged \$1.32. The inclusion of these data would not alter the averages presented herein.

¹The regions used in this study include: New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Middle Atlantic—New Jersey, New York, and Pennsylvania; Southeast—Alabama, Georgia, Mississippi, North Carolina, Bouth Carolina, Tennessee, and Virginia; Southeast—Arkansas, Louisiana, Okiahoma, and Texas. The number of cotton-textile workers employed in other regions is so small that presentation of data for those regions is not warranted.

See Monthly Labor Review, August 1952 (p. 140).

Mills manufacturing textiles containing 25 percent or more wool were excluded; otherwise mills were included when mixture contents were predominantly cotton.

Information obtained from the Bureau of the Census indicates that production of cotton broad-woven goods was slightly higher in 1954 than in 1952 and only a little less than in 1947.

production of fine goods in the Southeast, although not proportionally as important as in New England, is actually higher in absolute terms.

Mills having collective bargaining agreements with labor unions employed nearly 30,000, or 95 percent, of the workers in New England. In the Southeast 16 percent, or 50,000, of the workers were employed in mills covered by union contracts. Four-fifths of these were located in North Carolina, South Carolina, and Virginia. They were concentrated largely in mills having more than 1,000 workers; half of them worked in 10 large mills.

Two-fifths of the millworkers in the cottontextile industry were paid on an incentive basis, predominantly piecework. Spinners, weavers, and winders were among the largest groups of incentive workers.

Average Earnings

The average straight-time hourly earnings of production workers in the cotton-textile industry were \$1.19 in November 1954 (table 1), the same as in March 1952. However, there were differences in wage movements among the regions during this period. Earnings in the 7 Southeastern States followed the national pattern, remaining at \$1.17 an hour because of the absence of any major wage

adjustments in southern textile mills since April 1951. At the same time, a series of wage decreases negotiated in New England during late 1952 and early 1953 largely accounted for the reduction in the regional average from \$1.38 in March 1952 to \$1.32 in November 1954. The number of workers (30,500) employed in New England, however, was not sufficiently large for the decline in the regional earnings level to be reflected in the national average.

Average earnings in yarn mills are less than those in weaving or integrated mills because of the absence of skilled occupations required by the weaving operations in the latter establishments. In the Southeast, where more than 90 percent of the yarn-mill employment is concentrated, yarn-mill workers averaged \$1.10 an hour in November 1954, 9 cents less than those in integrated mills. The comparatively high hourly average for cotton-mill workers in the Middle Atlantic region (\$1.52) is largely due to the fact that three-fourths of the workers in this region are employed in weaving mills which hire a larger proportion of skilled workers.

Workers in integrated mills averaged \$1.31 an hour in New England as compared with \$1.19 in the Southeast. With the comparison limited to mills producing combed-yarn fabrics (the major

Table 1.—Number and average straight-time hourly earnings 1 of production workers in cotton-textile mills, by selected characteristics, November 1954

	United	States 1	New I	New England		Middle Atlantic		Southeast		Southwest	
Ren	Number of workers	Average hourly earnings	of	Average hourly earnings	of	hourty	Number of workers	Average hourly earnings	of	hourty	
All milk: All production workers Men Women Type of mill and product ³	196, 781	\$1. 19 1. 21 1. 14	30, 467 17, 119 13, 348	\$1.32 1.36 1.26	2, 253 1, 480 773	\$1. 52 1. 64 1. 30	287, 526 172, 718 114, 808	\$1. 17 1. 20 1. 13	8, 293 4, 798 3, 495	\$1.00 1.00 1.00	
Yarn mills. Carded yarn. Combed yarn. Integrated mills. Carded-yarn fabries. Combed-yarn fabries. Predominant class of fabries.	29, 275	1, 11 1, 11 1, 12 1, 20 1, 18 1, 29	25, 725 7, 920 17, 965	1. 30 1. 31 1. 31 1. 31			64, 310 28, 017 36, 256 219, 096 194, 573 24, 523	1. 10 1. 10 1. 11 1. 19 1. 18 1. 27	8, 298 8, 298	1, 00 1, 00	
Duck and allied fabrics. Narrow sheeting and allied coarse- and medium-yarn fabrics. Wide sheeting and allied coarse- and medium-yarn fabrics Print-cloth-yarn fabrics. Colorsd-yarn fabrics. Towels, toweling, and diabcloths.	44, 637	1. 18 1. 15 1. 19 1. 19 1. 19 1. 25 1. 19	********		********		17, 218 22, 938 36, 932 43, 892 25, 709 11, 894	1. 18 1. 16 1. 18 1. 19 1. 20 1. 24 1. 18	1,002		
Napped fabrics. Fine cutton fabrics (combed, part-combed, and fine-carded). Specialties and other woven cutton fabrics	44, 844 23, 668	1. 29 1. 18	18, 945	1. 31	1,541	1.60	10, 258 25, 899 19, 286	1. 27 1. 12	*********		

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

³ Data are not shown separately for weaving mills but are included in totals above. Mills engaged in weaving fabrics from purchased yarn only employed

an estimated 6,556 workers at the time of the study and were concentrated for the most part in the Southeast and Middle Atlantic regions.

Norz: Dashes indicate no data or insufficient data to justify presentation.

Table 2.—Percentage distribution of production workers in cotton-textile mills by average straight-time hourly earnings 1 and predominant type of yarn spun or woven, United States and selected regions, November 1954

	U	nited Stat	es 1	N	iew Engla	ba	Middle	Atlantie		Southeas	4	Sout	hwest
A verage hourly earnings ¹ (in cents)	All types	Carded yarn or fabrie	Combed yarn or fabric	All	Carded yarn or fabric	Combed yarn or fabric	All	Carded yarn or fabric	All	Carded yarn or fabric	Combed yarn or fabric	All	Carded yarn or fabric
Under 75	0.5 9.3.0 3.4 6.2.2 12.4 12.0 12.3 9.5 7.2.2 6.1 8.4 6.6 4.7 7.3 1.0 1.2 1.2 1.3 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	(9) 0.7 1.2 3.3 6.4 12.5 11.7 9.5 7.0 6.6 6.4 4.4 4.4 4.5 3.7 1.0 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5	(7) 0. 1 .26 3. 7 5. 8 9. 8 10. 6 14. 2 9. 6 14. 2 9. 6 1. 3 2. 9 1. 9	(9) (0) 0. 2 1 1 3 3.9 9 18. 4 12.1 1 10. 3 10. 4 17. 1 6. 0 7. 5 5. 1 5. 5 5. 0 1. 6 1. 6 1. 6 1. 6 1. 6 1. 6 1. 6 1. 6	6.1 (7) .5 .1 .2 .8 .6 .7 .13.4 .4 .12.2 .10.8 .	(9) (0) (0) (1) (2) (2) (2) (2) (3) (4) (4) (5) (6) (6) (6) (7) (7) (8) (8) (8) (9) (9) (9) (9) (9) (9) (9) (9) (9) (9	0.42 -7.7 -1.23 -6.47 -6.10 -6.37 -8.66 -1.32 -6.32 -1.32 -3.32 -8.32 -1.32 -8.32 -1.32 -8	0.3 .9 .7 1.4 1.1 2.4 6.7 7.6 8.2 8.6 6.6 7.7 8.3 8.2 8.9 8.7 7.4 4.1 8.4 8.4 8.4 8.1 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	(7) 6.89 2.96 3.66 7.13.70 13.09 6.96 5.4.5 4.5 4.5 4.5 4.5 4.5 4.5 (7) (7) (7) (7)	(?) 0.7 1.1 2.2 12.9 11.8 6.9 6.8 8.8 1.2 9 (?) (?)	(7) 6. 1 3. 2 2 4. 9 7. 8 13. 1 13. 3 12. 1 8. 8 7. 0 6. 6 4. 6 4. 7 4. 9 2. 8 2. 2 2. 2 2. 2 2. 3 1. 3 1. 3 1. 3 1. 3 1. 4 1. 5 1.	0.9 7.8 10.8 10.8 8.7 7 12.8 11.7 7.2 4.4 6.7 6.7 6.7 4.9 1.4 1.4 1.4 1.4 1.4 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6	0. 7. 16. 10. 15. 12. 12. 12. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15
Total	100, 0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	329, 814 \$1, 19	246, 352 \$1. 18	83, 462 81. 21	30, 467 \$1, 32	9, 523 \$1, 33	20, 944 81, 31	2, 253 \$1, 52	2, 031 \$1. 51	287, 526 81, 17	225, 230 81, 17	62, 296 61. 17	8, 268 \$1, 05	8, 290 \$1, 08

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
² Includes data for regions in addition to those shown separately.

product in New England) the North-South differential was 4 cents. New England workers averaged \$1.31 in both the carded-varn and combed-varn fabric mill groups, while in the Southeast, the averages recorded for these two types of establishments were \$1.18 and \$1.27, respectively.

Mills producing fine cotton fabrics (combed, part-combed and fine-carded) employ the majority of the cotton-textile workers in New England. These workers averaged \$1.31 an hour in November 1954. In the Southeast, where most cotton textiles are woven from a coarser, carded yarn, the average earnings of workers in mills weaving duck fabrics, sheetings, print cloth, colored-yarn fabrics, and napped fabrics were within the range of \$1.16 and \$1.20 an hour; on the other hand, workers employed in mills producing fine cotton fabrics and towels averaged \$1.27 and \$1.24 an hour, respectively. The latter mills are of larger than average size in terms of employment.

Women were usually employed in the less skilled jobs of the cotton-textile industry. The women, who numbered 133,000, received \$1.14 an hour in

November 1954, while the 197,000 men averaged \$1.21 an hour.

Distribution of Earnings

Individual earnings in the cotton-textile industry ranged from as low as 75 cents to more than \$2 an hour (table 2). However, the earnings of a large majority of the workers were within a comparatively narrow range. Approximately half of the workers in the Southeast earned between \$1 and \$1.20 an hour, and a similar proportion of workers in New England received from \$1.10 to \$1.30 an hour. Earnings below 90 cents an hour were reported for 0.2 percent of the workers in New England and 4.3 percent in the Southeast. Fifteen percent of the workers in the Southeast earned less than \$1 an hour, as compared with about 0.5 percent in New England. Hourly earnings of less than \$1.25 were recorded for 45 percent of the workers in New England and 70 percent of those in the Southeast region.

I Less than 0.05 percent.

NOTE: Due to rounding, sums of individual items do not necessarily equal

An insignificant proportion (less than 0.05 percent) of the workers carned less than 75 cents.

Occupational Earnings

Occupational categories for which average straight-time hourly earnings are presented in table 3 account for more than half of the production workers in the cotton-textile industry. They were selected for study because of their numerical importance and their representativeness of the entire job-rate structure. Nationwide averages for these job categories ranged from 99 cents for men janitors to \$1.66 for Jacquard-loom fixers.

The average earnings for occupations in which large numbers of men were working were: Hand truckers and bobbin boys, \$1.02; spinning-frame doffers, \$1.23; slubber tenders, \$1.28; weavers, \$1.39; and loom fixers, \$1.55. Two-thirds of the women millworkers were employed in four categories: Ring-frame spinners at average hourly earnings of \$1.14; yarn winders, \$1.13; battery hands, \$1.06; and weavers, \$1.35.

Occupational pay levels were higher in New England than in the Southeast, usually by 10 to 20 cents an hour. However, for the relatively high-paying weaving and loom fixing categories in combed-yarn fabric mills, regional wage differences were much smaller.

Establishment Practices

Minimum rates varied considerably among mills, but definite regional patterns were apparent. For example, mills employing two-fifths of the workers in the Southeast reported a minimum en-

Table 3.—Average straight-time hourly carnings 1 of men and women production workers in selected occupations in cotton-textile mills, by predominant type of yarn spun or woven, United States and selected regions, November 1954

	U	nited St	ates 1	,	New Eng	land		iddle lantie	Southeast			Sou	thwest
Sex and occupation	All	WHEN OF	Combed yarn or fabric	All	Carded yarn or fabric	Combed yarn or fabric	All types	Carded yarn or fabric	All types	TOURS	Combed yarn or fabric	All types	Carded yarn of fabric
Men	1												
	81, 36	81.39	\$1,35	\$1.45	\$1.44	\$1, 47			81, 37	\$1,39	\$1, 32	\$1.26	\$1.2
Card tenders		1.10	1.13	1.26	1. 25	1, 27			1.09	1.09	1, 10	1.06	1.0
Comber tenders		1.22	1. 22	1.36		1, 36			1, 20	1. 22	1, 20		
Doffers, spinning frame	1.29	1.24	1, 18	1. 38	1.36	1, 39			1. 22	1, 24	1, 14	1. 23	1.2
Inspectors, cloth, machine	1.15	1.15		1, 26			\$1.34	\$1.34	1.15	1, 15			
Janitors (excluding machinery cleaners)	. 90	.99	1.01	1.11	1.11	1. 12	1.09	1.09	.99	. 99	. 97	. 89	. 8
Loom fixers		1.58	1, 65	1.08	1,72	1. 67	2.01	1. 97	1.53	1.52	1.63	1. 37	1.3
Bax loams		1.50	2. 000	1.72		20.00		2.00	1.54	1. 50			
Jacquard looms		1.65		1. 87	1, 87		2.16	2.11	1.53	1.53	*******		
Plain and dobby looms	1.54	1.52	1.64	1, 67	1.68	1, 67	1.71	1.71	1, 53	1. 52	1, 62	1. 37	1.3
Machinists, maintenance	1 40	1.48	1.52	1.59	1, 60	1. 58	1.69	1.69	1. 47	1.47	1.50	1. 33	1.3
Hisaber tenders		1. 28	1.50	1. 52	1.51	1. 53	1. 63	******	1. 31	1, 28	1, 49	1. 18	1.1
Blubber tenders		1, 28	1, 28	1, 49	1.49	1.48	2. 100	*******	1. 27	1. 27	1, 25	1. 22	1.2
Standard		1. 23	1. 25	1. 48	1.49	1, 43	******	******	1. 21	1.20	1. 24	****	
Long-draft		1. 29	1, 28	1. 49	1.48	1, 49	****	*******	1. 28	1, 29	1, 25	1. 22	1.2
Truckers, hand (including bobbin boys)	1.02	1.02	1.06	1. 16	1. 15	1. 16	1.14	1, 12	1.02	1.01	1.02	. 98	. 90
Warper tenders, high speed (300 y, p, m, and over)	1.19	1. 21	1.12	A. 19	8. 10	1. 10	4. 44	1.10	1. 18	1. 20	1.12		
Weavers		1. 37	1. 48	1, 55	1, 64	1.50	1.85	1, 82	1. 35	1. 34	1.44	1, 19	1.10
		1. 33	1. 48	1. 53	1.01	1.00	1.00	1. 100	1.33	1. 32	1. 44	0000	
Bar looms		1. 37	1. 45	1. 56	1 40	*******	*****	*******	1. 40	1, 38	1.44		******
Dobby looms			1. 40	1. 20	1.40	*******	1. 80	1, 86	1. 34	1. 33	1. 99	*****	*******
Jacquard looms		1.86		9 40	4 40	4 40	1. 55	1.55	1.34	1. 33	4 49	5 14	1. 16
Plain looms	1. 36	1.34	1. 47	1.48	1. 46	1. 40	1. 60	1. 00	1.00	1. 63	1. 43	1.16	1. 10
Women													
Battery hands	1.06	1.06	1.12	1.15	1. 16	1. 14		*******	1.06	1.06	1.10	. 98	. 90
Comber tenders	1. 26	1. 25	1. 26	1.38	*******	1.39	****		1. 22	1. 21	1.22		
Doffers, spinning frame	1.20	1. 21	1.31	1. 33	1. 28	1.38	77-74-	******	1.16	1.11	1. 22	1 00	
napectors, cloth, machine	1.00	1.07	1.16	1.16	1.17	1.16	1.13	1.10	1,08	1.07	1.16	1.00	1.00
ofinners, ring frame		1.14	1.14	1. 27	1. 27	1. 27	*****	*******	1.14	1.14	1.12	1.00	1.00
Twister tenders, ring frame	1.14	1.16	1.10	1. 33	1. 33	1. 33		*******	1.00	1.11	1.07	1.16	1.10
Warper tenders, high speed (300 y. p. m. and over)	1.15	1.14	1.20	1. 27	1. 31	1. 25	1. 87	1. 37	1.15	1.14	1.18	.99	. 91
Weavers	1.35	1.32	1. 45	1.47	1, 46	1. 48	1.48	1.45	1. 34	1. 33	1. 42	1.13	1. 13
Hux looms	1.34	1.28	********	1. 50	*******	*******	*****		1.35	1, 30	*******	*****	
Dobby looms	1.37	1.34	1.42	1. 47	1. 43	*******	*****	******	1. 37	1.34	*******	*****	
Jacquard Isoms		1.36		*****	******	********	1. 67	1. 63	1. 27	1. 27	********		
Plain looms	1. 35	1.33	1.45	1. 47	1. 44	1.48	1.31	1.31	1.34	1. 33	1.42	1. 15	1.10
Winders, yarn 1	1.13	1.13	1. 13	1.30	1.30	1.30	1.28	1. 29	1.11	1.12	1.10	1.04	1.04
Automatic spooler	1.16	1.17	1.15	1.30	1.30	1. 29			1.15	1.16	1.12	1.09	1.09
Cone and tube, automatic	1.16	1.16	1.14	1. 29	*******	*******		*******	1.16	1.17	1.13	1.02	1. 02
Cone and tube, nonautomatic, high speed	1.10	1.09	1.11	1.30	1. 26	1. 31	1. 19	1. 20	1.00	1.00	1.00		
Cone and tube, nonautomatic, slow speed		1.00	1. 26	1.34					1.08	1.04	******	*****	
Filling, automatie	1.15	1.15	1.18	1. 28	1. 35		1. 33	1. 31	1. 13	1.18	1.17	*****	
Filling, nonautomatie	1.11	1, 10	1. 19	-			1. 23		1. 11	1.10			

¹ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
2 Includes data for regions in addition to those shown separately.

[!] Minimum entrance and minimum job rates, for purposes of this study are defined as the lowest established rate for inexperienced and experienced workers, except watchmen, employed in regular textile departments.

Includes data for workers not shown separately.

Note: Dashes indicate no data or insufficient data to justify presentation.

TABLE 4.—Percent of production workers employed in cottontextile mills with formal provisions for selected supplementary wage benefits,1 by region, November 1954

Supplementary wage benefits ¹	United States	New Eng- land	Middle Atlan- tic	South-	South- west
Paid vacations :					
After 1 year's service 4	91	99	100	91	82
Less than I week	(1)	-	11	(1)	17
I week	86	99	77	85	65
After 5 years' service 4	92	100	100	91	63 82 56 21
1 week	92 30	3	16	32	56
2 weeks	60	96	66	58	21
Paid holidays * *	30	99	86	22	19
1 day	13			14	10
2 days	- 6	(1)		7	
6 days	10	98	59		
7 days	(8)	-	26		
Insurance and pension plans?		******	-		
Life insurance	87	06	78	85	100
Accidental death and dismem-		-		-	
berment insurance	51	95	24	47	42
Sickness and accident insur-	-	-			
ance	64	88	79	62	63
Hospitalization insurance	85	99	78	83	100
Surgical insurance	84	98	73	83	100
Medical insurance	31	96	36	24	62
Retirement pension	17	6	4	19	
Retirement severance pay	8	84	22	(0)	

If formal provisions covering supplementary wage benefits were applicable to half or more of the workers in an establishment, the benefits were con-sidered applicable to all workers. Because of length of service and other eligibility requirements, the proportion of workers currently receiving the benefits may be smaller than estimated. Due to rounding, sums of individual items do not always equal total.

Includes data for regions in addition to those shown separately.

4 Less than 2.5 percent.

· Limited to full-day holidays provided annually.

trance rate of 75 cents an hour; virtually none of the New England mills reported hiring rates below 80 cents and nearly half of the workers in this region were employed by mills reporting a minimum entrance rate of \$1.105. Advancement from an entrance rate to a job rate in the cotton-textile industry frequently involves either a formal training period of from 6 to 12 weeks or a progression of rates based on length of service or merit rating. In many mills, however, minimum entrance and minimum job rates were identical. In New England, \$1.105 was the most prevalent minimum job rate as well as the minimum entrance rate. majority of the workers in the Southeast were in mills reporting minimum job rates of between 90 cents and \$1.035 an hour.

Work schedules of 40 hours a week applied to four-fifths of the workers covered in November

1954, representing no significant change from the March 1952 survey. About half of the workers in the industry were employed on late shifts in November 1954. Premium pay for second-shift work was not common. Third-shift workers, however, generally received higher rates of pay than day-shift workers. The most prevalent differentials were 5 cents an hour in the South and 7 cents in New England.

The practice of providing paid holidays, although virtually universal in the New England cotton-textile industry for a number of years, has not yet been widely adopted among southern mills, Nearly all of the cotton-mill production workers in New England received 6 holidays a year with pay (table 4). About 20 percent of the workers in the South were employed in mills providing paid holidays-nearly always 1 or 2 days a year.

Vacations with pay after 1 year of service were provided to nearly all production workers in the New England and Middle Atlantic regions, to 91 percent in the Southeast, and to 82 percent in the Southwest. New England mills typically base vacation benefits on a specified percent of the individual's annual earnings—generally 2 percent (approximately equal to a week's pay) after 1 year of service, 3 percent after 3 years, and 4 percent after 5 or more years. Southeastern workers usually are provided a week's vacation with pay after 1 year of service and 2 weeks after 5 or more years.

Life insurance, as well as sickness and accident, hospitalization, and surgical benefits, financed at least in part by the employer, were available to a majority of the workers in all regions. In the South, insurance benefits were more prevalent in November 1954 than 2 years earlier.

Pensions—providing regular payments for the remainder of the worker's life upon retirementapplied to 19 percent of the production workers in the Southeast, 6 percent in New England, and 4 percent in the Middle Atlantic region. Plans providing lump-sum payments upon retirement applied to 84 percent of the workers in New England and 22 percent in the Middle Atlantic region, but they were virtually nonexistent in the South.

^{**}Nucrose data for regions in abstract the percent of annual earnings and flat-sum amounts, were converted to an equivalent time basis; generally, vacation benefits applicable to 5 years of service also apply to longer periods of service. Includes provisions in addition to those shown separately.

⁷ Includes only those private plans for which at least a part of the cost is borne by the employer and excludes legally required plans such as workmen's compensation and aocial security.

Summaries of Studies and Reports

Analysis of Work Stoppages During 1954

FEWER WORKERS and man-days of idleness were involved in work stoppages in 1954 than in any year since World War II and fewer stoppages occurred than in any year during that period except 1948. (See table 1.) A total of 3,468 strikes and lockouts occurred in 1954,1 involving 1,530,000 workers and 22,600,000 man-days of idleness, according to final figures for the year published by the Bureau of Labor Statistics. The idleness incurred amounted to 0.2 percent of the year's available working time-a proportion substantially lower than the postwar average. Strikes ending in 1954 lasted an average of 22.5 calendar days-about as long as the postwar average. Idleness per worker involved was somewhat higher in 1954 than in 1953-14.7 and 11.8 man-days, respectively, but was below most recent years.

A total of 18 large stoppages (each involving 10,000 or more workers) took place during the year compared with 28 such stoppages in 1953 and 35 in 1952 (table 2). Altogether, the large stoppages accounted for 28.5 percent of all workers on strike during 1954 and a third of total idleness. Most of the major stoppages continued for less than 2 weeks. The 83-day Pacific Northwest lumber strike was the largest in terms of total idleness, accounting for 1 out of 6 man-days idle for the year.

The relatively sharp decline in the level of strike activity during 1954 was due, at least to some degree, to slackening of economic activity. Industrial production declined from peak levels as inventories and defense expenditures were reduced. The gross national product declined slightly (by about 2 percent) from 1953 and unemployment was substantially higher. The relative stability of consumer prices also eased the pressure to obtain upward wage adjustments.

Union concern with problems associated with the level of unemployment, together with the desire of many employers to avoid stoppages to maintain their competitive position, contributed to the peaceful negotiation of somewhat smaller increases in wages and supplementary benefits than those in most other postwar years. Thus, major steel producers and the CIO Steelworkers agreed to a 5-cent hourly increase in wage rates, and to increases in pensions and insurance benefits. Generally similar agreements were negotiated without major strikes in a variety of other industries, including electrical machinery, meat packing, and paper, and for the operating brotherhoods of the nation's railroads. Relatively poor economic conditions in textiles and coal mining were pervasive influences in keeping levels of strike activity in these industries low.

Industries Affected

Every group experienced fewer stoppages than in 1953. (See table 3.) Similarly, in most industries the number of workers and man-days of idleness were lower than in most or all postwar years. The most notable exception was in lumber, where the prolonged West Coast strike raised this industry's idleness to a postwar peak. Over 4 times as many workers and 8 times as many man-days of idleness were recorded in this industry group as in 1953. In contrast with a number of other large industries, wage rates for most workers in the Northwest lumber industry had not been increased during 1953. The strike began in June when the lumber producers and the AFL and CIO

¹ This is the total number of verified strikes. It does not include 13 small disputes for which the Bureau was unable to secure information from the parties that a work stoppage had actually occurred.

All work stoppages known to the Bureau of Labor Statistics and its various cooperating agencies, involving six or more workers and lasting a full day or shift or longer, are included in this report. Figures on "workers involved" and "man-days idle" cover all workers made idle for as long as one shift in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

TABLE 1 .- Work stoppages in the United States, 1927 to 1954 1

	Work	Work stoppages Workers involved 1			1	Man-days id		Work stoppages		Workers in- volved *		Man-days idle			
Year	Num- ber	Average duration (calendar days) ¹	Num- ber (thou- sands)	Per- cent of total em- ployed	Num- ber (thou- sands)	Percent of estimated working time of all workers	Per worker in- volved	Year	Num- ber	Average duration (calendar days) ¹	Num- ber (thou- sands)	Percent of total employed	Num- ber (thou- sands)	Percent of estimated working time of all workers	
1927 1928 1929 1930 1931 1932	707 604 921 637 810 841 1, 605	26. 5 27. 6 22. 6 22. 3 18. 8 19. 6 16. 9	390 314 289 183 342 324 1, 170	1. 4 1. 3 1. 2 . 8 1. 6 1. 8 6. 3	26, 200 12, 600 5, 350 3, 320 6, 890 10, 500 16, 900	0. 37 . 17 . 07 . 08 . 11 . 23 . 36	79. 5 40. 2 18. 5 18. 1 20. 2 32. 4 14. 4	1941	4, 288 2, 968 3, 752 4, 956 4, 750 4, 985 3, 663	18.3 11.7 8.0 8.6 9.9 24.2 26.6	2, 360 840 1, 960 2, 120 3, 470 4, 600 2, 170	8.4 2.8 6.9 7.0 12.2 14.5 6.8	23, 000 4, 180 13, 800 8, 720 38, 000 116, 000 34, 600	0. 32 .08 .15 .09 .47 1. 43	9. 5. 6. 11. 28.
1904	1, 856 2, 014 2, 172 4, 740 2, 772 2, 613 2, 508	19.5 23.8 23.3 20.3 23.6 23.4 20.9	1, 470 1, 120 789 1, 800 688 1, 170 877	7.2 8.2 3.1 7.2 2.8 4.7 2.3	19, 600 15, 500 13, 900 28, 400 9, 150 17, 800 6, 700	.38 .29 .21 .43 .15 .28 .10	13. 4 13. 8 17. 6 15. 3 13. 3 16. 2 11. 6	1948	3, 419 3, 606 4, 843 4, 737 5, 117 5, 001 3, 468	21. 8 22. 8 19. 2 17. 4 19. 6 20. 3 22. 8	1, 900 3, 000 2, 410 2, 220 3, 540 2, 400 1, 530	5.5 6.9 5.5 8.8 5.6 3.7	34, 100 50, 500 38, 800 92, 900 50, 100 28, 300 22, 600	.37 .89 .44 .23 .87 .28	17. 4 16. 7 16. 1 10. 3 16. 7

Available information for earlier periods appears in BLS Bull. 1016, Handbook of Labor Statistics, table E-2. For a discussion of the procedures involved in the collection and compilation of work stoppage statistics see BLS Bull. 1198, Techniques of Preparing Major BLS Statistical Series (p. 166). In all tables presented in this article, workers are counted more than once if they were involved in more than one stoppage during the year.

³ Figures are simple averages; each stoppage is given equal weight regardless of its size.
⁴ The total of 3,468 does not include 13 small disputes for which the Bureau was unable to secure information from the parties that an actual work stoppage occurred.

unions failed to agree on a wage increase after 4 months of negotiations. Except for scattered settlements, most of the lumber and sawmill workers remained out until early September, when they agreed to the appointment of a fact-finding board proposed by the Governors of Washington and Oregon. Subsequently, the board recommended a 7½-cent hourly wage increase which was adopted generally in the industry.

In the rubber industry, 2 strikes (1 of 23 days at Firestone Tire and Rubber Co., and 1 of 51 days at Goodyear Tire and Rubber Co.) brought idleness to its highest point in recent years. Except for lumber and rubber, where idleness exceeded 2 percent of total time worked, no other industry group experienced an idleness ratio that exceeded 0.75 percent of the estimated time worked in 1954.

Two long strikes—one in Pittsburgh and another in Port Arthur, Tex.—accounted for the highest level of idleness in retail and wholesale trade in recent years. The Pittsburgh department store strike of several thousand workers began late in 1953 and continued throughout 1954. A few of the 12 AFL locals involved reached agreement late in 1954 but many of their members did not return to their former jobs pending settlement by the remaining unions that had gone on strike.

In construction, which achieved peak levels of activity in 1954, strike idleness, although relatively high, remained below 1952 and 1953. The total number of construction strikes (804) was lower than in 1953 but included 7 of the year's 18 stoppages of 10,000 or more workers.

By way of contrast, in textiles, despite strikes against wage reductions in several woolen firms (American Woolen Co., the Woonsocket Association of Manufacturers, Inc., and Bachmann Uxbridge Worsted Corp.), idleness was markedly below other years since World War II except for 1953 and 1949, when the industry was also experiencing pronounced economic difficulties.

Typically, mining has a high incidence of strikes. This industry group experienced in 1954 more work stoppages than any other except construction; trade; and transportation, communication, and other public utilities. However, the number of mining strikes in both 1953 and 1954 showed a sharper decline compared with the period 1946-52 than that for any other industry group.

The agreement reached in November 1954 by the Teamsters' local, representing drivers and helpers, provided for a wage increase but gave the atoms the right to decide when to assign helpers to delivery drivers, the latiter provision had been opposed by the union. The issue of parcel post deliveries was resolved by agreement that they would be used only when all drivers are working. A warehouse local affiliated with the Teamsters agreed to a wage increase and a modified union shop, and a lodge of the AFL Machinists settled for a wage increase. The strike ended March 16, 1955, after the unions, representing office workers, retail clerks, and restaurant workers, agreed to remove their picket lines and continue their negotiations with the employers. All other unions involved had reached agreement with the stores prior to this

Table 2 .- Work stoppages involving 10,000 or more workers, selected periods

	Stoppages involving 10,000 or more workers										
			Workers	involved	Man-days idle						
Period	Num- ber	Percent of total for period	Num- ber (thou- sands)	Percent of total for period	Num- ber (thou- sands)	Percent of total for period					
985-39 average	11 18 42 31 15 20 18 22 19 35 28	0. 4 .5 .9 .6 .4 .6 .8 .8 .4 .7	365 1, 270 1, 350 2, 920 1, 000 870 1, 920 738 457 1, 690 437	82.4 58.4 58.9 63.6 47.5 44.5 63.2 20.7 20.6 47.8 27.1	5, 280 23, 900 19, 300 66, 400 17, 700 18, 900 34, 900 21, 700 5, 680 36, 900 7, 270 7, 520	31. 2 59. 6 50. 7 57. 2 51. 2 55. 3 69. 6 24. 6 62. 6 25. 7 33. 3					

Most of the mining strikes that did occur were brief, localized stoppages growing out of grievances over working conditions. The only large strike in bituminous coal was a 9-day sympathy action of 13,000 workers at mines of 8 companies in southwestern Pennsylvania which arose out of a seniority dispute relating to layoff procedures in a mine employing several hundred workers.

Employment in anthracite mining dropped to its lowest level in more than a half century. An outgrowth of this development was the Panther Valley (Pa.) dispute which signaled the liquidation of the large anthracite producing operations of the Lehigh Navigation Coal Co. After this company had closed its mines in the Panther Valley in early May because of "excessive operating losses," it proposed a reopening with revised work rules designed to increase the miners' daily production. National officials of the United Mine Workers (Ind.) urged acceptance of these proposals but they were rejected by rank and file members of the Tamaqua local who established picket lines which prevented reopening of the mines. Subsequently, some of the mines were leased to another company, which resumed partial operations with a smaller labor force under a contract with the Mine Workers.

Principal Issues

As in other recent years, wages, hours, and supplementary benefits, either alone or in combination with issues involving union status, accounted for about half of all work stoppages and a higher proportion of workers and idleness. (See table 4.) This group of issues caused 80 percent of the idleness in 1954; the corresponding proportions in other years since 1945 ranged from 70 to about 95 percent. Most stoppages in this category represented efforts to improve rates of pay and related benefits but a few were efforts to resist wage reductions (e. g., strikes in the woolen industry).

Of the year's 18 largest strikes, 12 arose primarily from disputes over issues of wages, hours, and/or supplementary benefits. These were the

TABLE 3 .- Work stoppages by industry group, 1954

		onges be- ig in 1954	Man-da during 1 stoppe	954 (all
Industry group	Num- ber	Work- ers in- volved	Number	Percent of esti- mated work- ing time of all workers
All industries	1 3, 468	1,530,000	122,600,000	0. 21
MANUPACTURENO	1,703	772,000	13, 700, 000	. 33
Primary metal industries Pabricated metal products (except ord- nance, machinery, and transportation	156	80, 400	962, 000	. 31
	175	42, 400	1, 200, 000	. 45
Ordnance and accemories	11			. 13
Electrical machinery, equipment, and				
supplies	116			. 35
Machinery (except electrical)	175	64,000		. 34
Transportation equipment	84	107,000	656, 000	. 15
Lumber and wood products (except furniture)	70	87, 300	4, 200, 000	2.25
Furniture and fixtures	70	10, 900	139, 000	. 16
Stone, clay, and glass products	106	20, 700	300,000	
Stone, clay, and glass products	65	28, 400		. 21
Apparel and other finished products made from fabrics and similar ma-				
terials	135	12, 200		
Leather and leather products	36	5, 560	53, 300	.06
Food and kindred products	157	73, 800 100	694, 000	(1)
Tobacco manufactures	37	9, 970		.06
Printing, publishing, and ailied indus-	30			.05
Chemicals and allied products	77	5, 950 18, 200	103, 000 159, 000	.06
Products of petroleum and coal	16	2, 230	50, 600	.06
Rubber products	83	108,000		2.49
Professional, scientific, and controlling instruments; photographic and op-				-
tical goods; watches and clocks Miscellaneous manufacturing indus-	24	18, 700	145, 000	, 18
tries	85	14, 200	186,000	. 15
NONMANUFACTURING	1, 765	761, 000	8, 900, 000	. 14
Agriculture, forestry, and fishing	11	2, 930	59, 900	(4)
Mining	249	111,000	845, 000	. 44
Construction	804	437,000	4, 800, 000	.71
Trade	206	53, 400	1, 600, 000	.06
Finance, insurance, and real estate Transportation, communication, and	10	146,000	13, 900	(*)
other public utilities	283 104	8,040	82, 900	(4)
Government—administration, protec- tion, and sanitation *	10	1,810	10, 400	(4)

¹ The sum of the figures in this column exceeds 3,468 because a few stopps extending into two or more industry groups have been counted in this column each industry group affected; workers involved and man-days idle widvided among the respective groups.

¹ In this and subsequent tables, the sum of the individual items may equal the totals for the group because of rounding the individual figures.

¹ Less than 0.05 percent.

Not available.

*Not available.

*Municipally operated utilities are included under "Transportation, or

Not available. Municipally operated utilities are included under "Transportation, con nication, and other public utilities."

Northwest lumber strike: 5 stoppages in construction: 2 rubber strikes: a New York-New Jersey trucking strike; a 3-day nationwide stoppage of installation equipment employees of Western Electric Co.; a 13-day strike at Sperry Gyroscope Co. in Great Neck, N. Y.; and the 2-day October stoppage of New York dockworkers.

Table 4.- Major issues involved in work stoppages, 1954

	Worl	k stopp iz	nges begir 1954	ning	Man-day during 19	rs idle
Major issues		Per-	Worker		during 19 stoppe	64 (all ges)
	Num- ber	of total	Num- ber	Per- cent of total	Num- ber	Per- cent of total
All basues	3, 468	100.0	1, 530, 000	100.0	22, 600, 000	100.0
Wages, hours, and supple- mentary benefits i	1,726	49.8	886, 000	87.8	16, 700, 000	73.9
Wage increase	1, 118 43	32. 2 1. 2	577, 000 15, 500	37. 6 1. 0	12, 500, 000 268, 000	55. 5 1. 2
Hour increase. Wage increase, pension	50 2	1.4	20, 600 10	(1)	201, 000 630	(1)
and/or social insurance benefits Pension and/or social in-	197	5.7	145, 000	9.5	2, 510, 000	11.1
Other #	25 291	8.4	4, 540 123, 900	8.1	68, 500 1, 110, 000	4.0
Union organization, wages, hours, and supplementary benefits ¹	159	4.6	15, 400	1.0	1, 590, 000	7.0
Recognition, wages and/ or hours Strengthening baryain-	104	3.0	7, 810	. 5	252,000	1.1
ing position, wages and/ or hours	14	. 4	3, 370	. 2	1, 200, 000	5.8
wages and/or hours Discrimination, wages	39	1. 1	4, 120	. 3	138, 000	.6
and/or hours	2	. 1	130	(1)	3, 600	(1)
Union organization	429	12.4	39, 300	2.6	618, 000	2.7
Recognition	208	8.6	13, 200	. 9	405,000	1.8
Ing position Closed or union shop Discrimination Other	11 88 17 15	2.5	780 15, 600 8, 370 1, 400	1.0	8, 470 148, 000 44, 500 10, 200	(*) .7 .2
Other working conditions	836	24. 1	451, 000	29.4	8, 110, 900	13. 8
Job security	396	11.4	175, 000	11.4	1, 150, 000	5.1
Shop conditions and pol- icies	364 60 16	10.5 1.7 .5	163, 000 78, 900 34, 900	10.6 5.1 2.3	829, 000 499, 900 641, 000	3.7 2.2 2.8
Interunion or intraunion matters	254	7.3	135, 000	8.5	529,000	2.3
Sympathy	39	1.1	34, 000	2.2	117, 600	. 5
Union rivalry or faction- alism. Jurisdiction Union regulations. Other	60 162 1 2	1.7	19. 400 77, 700 1, 600 2, 400	1.3 6.1 .1 .2	123, 000 282, 000 3, 270 3, 400	1.2 (0)
Not reported	64	1.8	8, 130	3.	37, 700	.2

The change in title does not indicate any change from previous years in ition or content of these groups.

A 6-month stoppage over wages and related benefits combined with union security, involving several thousand employees of the Dierks Lumber Corp. in Arkansas and Oklahoma, produced considerable violence. The long Pittsburgh department store stoppage also involved similar issues.

The October work stoppage in the Port of New York-the second major dock strike during the year—occurred over a retroactive wage increase for longshoremen after certification by the National Labor Relations Board (NLRB) of the International Longshoremen's Association (Ind.) as the bargaining agent for these workers (on August 27). Because of the long representation struggle between this union and the AFL Longshoremen, no change in wages and working conditions had been negotiated when the previous contract expired in October 1953. The longshoremen struck on October 5, 1954, to enforce their demand that before negotiating a new contract, a wage increase should be granted retroactive to the expiration of the former contract. The stoppage ended on October 6 after the New York Shipping Association agreed to an 8-cent hourly wage increase, retroactive to October 1, 1953, and the union pledged not to strike for 45 days pending negotiations on the new contract.

Union status alone was the major issue in about 12 percent of the strikes, with 3 percent of the workers and man-days of idleness. No strikes in this category involved 10,000 or more workers but there were several smaller long strikes. A drive by the CIO Distributive, Processing and Office Workers Union to organize workers in retail stores in Port Arthur, Tex., resulted in a stoppage that began in late October 1953 and was still in effect at the end of 1954. Another lengthy strike over union security concerned efforts of the CIO United Steelworkers to gain recognition and a contract from Buffalo Arms, Inc., at Akron, N. Y., after being certified as bargaining agent for the plant's employees. This stoppage also continued into 1955.

As in most postwar years, disputes over day-today working conditions, such as workloads, job security, shop conditions and policies, together with protests against injunctions or administrative actions of government agencies, ranked second to wages and related benefits as strike causes. These disputes accounted for 24 percent of all stoppages, 30 percent of workers and about

efinition or content of these groups.

1 Less than 0.65 percent.

1 Includes stoppages in which the major issue was retroactivity, holidays, acations, job classification, piscework rates, or related matters.

1 This group includes protest strikes against action, or lack of action, by overment agencies. The 29-day stoppage of New York-New Jersey agashoremen in March was included in this group.

14 percent of total idleness in 1954. The 29-day work stoppage of longshoremen in the New York area in March and the July stoppage at Detroit plants of the Chrysler Corp. contributed about a fifth of the total idleness in this group. Seniority was the major issue in a 146-day stoppage at the wire plant of the Western Electric Co. in Tonawanda, N. Y. Pilots of American Airlines struck against transcontinental nonstop flights exceeding 8 hours.

The longshore stoppage began when supporters of the independent International Longshoremen's Association defied a court injunction obtained by the NLRB under the secondary boycott provisions of the Labor Management Relations Act. As a result of rivalry with the AFL Longshoremen and Teamsters, the union had declared a boycott of all truck freight handled by the Teamsters at any New York pier. The Teamsters retaliated by establishing picket lines. On March 4, the NLRB obtained a temporary Federal court restraining order directing the independent union to avoid strikes or other actions that would interfere with the loading or unloading of trucks at the piers. Supporters of the independent ILA stopped work on March 5, contending that the restraining order should also have applied to the AFL Teamsters and Longshoremen. Although the NLRB petitioned the court for contempt action against the union and some of its officers. the stoppage remained virtually portwide during most of March with occasional clashes occurring between AFL Longshoremen and pickets of the independent union. Endorsement of the strike by officials of the independent ILA, on March 24, and the threat that the strike might spread to other East Coast ports, brought NLRB warnings of further legal action and a joint statement from the Secretary of Labor, the Governor of New York, and other officials that the Federal and State Governments would join in efforts to end the strike. The strike ended April 2 after the NLRB set aside the December 1953 representation election among longshoremen on New York docks and indicated that the independent ILA would have no place on the new ballot if it did not cease "conduct designed to thwart or abuse the processes of the Board."

A 24-day strike against American Airlines, Inc., was called by the AFL Air Line Pilots Association in July to protest scheduling of nonstop westbound coast-to-coast flights in excess of 8 hours' flying time without a relief crew. The union asserted that such flights were a safety hazard and protested the waiver by the Civil Aeronautics Board of a 23-year-old, 8-hour flying rule, thereby enabling scheduled air carriers to make nonstop coast-to-coast flights with the same crew. The stoppage ended after the union and the company accepted a proposal by the National (Railway) Mediation Board that a neutral consider the dispute and submit nonbinding recommendations.

Protests against diversion of work or movement of plants to other areas produced work stoppages, several of which received widespread union support as labor became increasingly concerned with the problem of plant migration. One of the most outstanding strikes in this group involved employees of the Hat Corp. of America in Norwalk. Conn., who were idle from July 1953 to late May 1954. The workers, represented by the United Hatters, Cap and Millinery Workers (AFL), were given both moral and monetary support by a number of other AFL and CIO unions. Although the final settlement did not deal with the basic issue—the union's efforts to obtain a job security clause in the contract that would prohibit further diversion of work from the Norwalk area-the company indicated that it would continue to make Norwalk the main base of its major operations in producing felt hats.

A dispute between the American Safety Razor Corp. and the independent United Electrical Workers union centered on the company's proposals to transfer operations from its 50-year-old Brooklyn, N. Y., plant to Staunton, Va. The resulting stoppage began as a sit-in strike on September 30. This phase of the strike ended on October 13 in the face of a court order. Several days later the company announced that it intended to close the plant and to hasten the transfer of its operations to the new location.

A strike at the Yonkers, N. Y., plant of Alexander Smith, Inc., beginning in mid-June, was

³ See Analysis of Work Stoppages, 1963, BLS Bull. 1163 (pp. 31-32), for a discussion of the dispute among dockworkers' unions in the Port of New York in 1963.

[•] The dispute was settled in January 1985, when the employer and the union signed an agreement permitting westbound nonstop flights in excess of 8 hours and providing extra pay for pilots on such flights. The agreement reaffirmed an 8-hour flight-time rule for all other schedules and provided that pilots on nonstop transcontinental flights would receive 50 percent more flight-time credit and pay for all time in excess of 8 hours on a single flight. Extra pay of \$1.50 an hour for the captain and \$1 for the co-pilot would be carned for the entire time on a flight that takes more than 8 hours.

called because of a dispute over the employer's proposal for a new wage-rate structure at the plant and changes in working rules. On June 24 the company announced that it would shut down the plant permanently and carry on production in other plants. Officials of the Textile Workers Union (CIO) appealed to the Governor of New York for aid in keeping the 100-year-old Yonkers plant in operation. Subsequently, the company and the union signed an agreement providing for the temporary resumption of work in Yonkers on a limited scale to complete carpeting already on the looms. By mid-August the company began to lay off workers preparatory to final closing.

Strikes over interunion or intraunion matters (including union rivalry, jurisdictional, and sympathy strikes) usually account for a relatively small proportion of total strike activity and in this respect 1954 was no exception. These strikes accounted for 7 percent of all stoppages and 9 percent of the workers but 2 percent of total strike idleness. The number of strikes was lower than in the previous 3 years and fewer days of idleness were involved than in any postwar year except 1949 and 1950. However, the number of workers idle in such disputes was greater than in most recent years and both the number of work stoppages and workers involved represented a higher proportion of the total resulting from all causes than in any year for which data are available.

Stoppages by States

Idleness resulting from work stoppages in twothirds of the States was lower in 1954 than in all or almost all postwar years and in only 9 States was it unusually high compared with preceding years. The most marked deviations from the national trend occurred in Oregon, Washington, and Montana: the long lumber strike resulted in alltime peaks for the first 2 States and a nonferrous strike raised Montana idleness to its highest level since 1934. In a number of States, idleness declined sharply compared with previous years, with some of the most notable decreases occurring in States where coal mining is important.⁵

Total idleness in Pennsylvania in 1954 amounted to 13.4 percent of all strike idleness in the United States (table 5). The prolonged Pitts-

TABLE 5 .- Work stoppages by State, 1954

	Works	toppages b in 1964	eginning	Man-days idle during 1984			
State	Num-	Workers	nvolved	(all stop	(Pages)		
	ber	Number	Percent of total	Number	Percent of total		
United States	1 3, 465	1, 530, 000	100.0	22, 600, 000	100.0		
Alabama	84	23, 400	1.5	355, 000	1.6		
Arizons	12	7, 020	. 5	107,000	. 8		
Arkansas	29	6, 450	.4	163, 000	. 7		
California		88, 100	8.7	1, 070, 000	4.7		
Colorado	30	7, 440	. 5	98, 300	. 4		
Connecticut	62	19,800	1.3	448,000	2.0		
Delaware	18	1, 350	.1	16, 100	.1		
District of Columbia	1.5	2, 440	.2	30, 500	.1		
Florida	62	8,020	. 5	68, 200	.3		
Georgia	36	13, 100	. 9	367,000	1.6		
Idaho	11	1, 190	.1	9, 240	(8)		
Illinois	206	56, 300	3.7	737, 000	3.3		
Indiana	107	81, 600	3.4	536,000	2.4		
lowa	47	19, 700	1.3	235, 000	1.0		
Kansas	26	8, 670	.4	205, 000	. 0		
Kentucky	103	31, 600	2.1	160,000	.7		
Louisiana	40	16, 900	1.1	394,000	1.7		
Maine	22	2, 360	.2	40, 800	.2		
Maryland	42	14,600	1.0	135,000	. 6		
Massachusetts	113	23, 400	1.5	300,000	. 1.3		
Michigan	204	171,000	11.2	1,000,000	4.7		
Minnesota	56	20, 300	1.3	314,000	1.4		
Mississippi	14	1,610	.1	11, 200	(F)		
Missourl	87	38, 300	2.5	862,000	3.8		
Montana	10	11,500	.7	430,000	1.9		
Nebraska	15	8, 270	.3	60, 400	. 3		
Nevada	10	2, 750	.2	20, 100	.1		
New Hampshire	16	2, 900	.2	28, 700	. 1		
New Jersey	198	95, 900	6.3	791,000	3.5		
New Mexico	18	3, 510	.2	47, 400	. 2		
New York	839	182,000	11.9	2, 010, 000	8.9		
North Uarolina	31	5, 540	.4	82, 900	4		
North Dakota	11	1, 680	-1	4, 540	(1)		
OhloOkiahoma	266	134, 000 9, 560	8.8	1, 830, 000 220, 000	1.0		
	-						
Oregon	34	39,000	2. 5	1,810,000	8.0		
Pennsylvania	387	174,000	11.3	3, 030, 000	18. 4		
Rhode Island	28	4, 880	.3	60, 900	. 8		
South Carolina	14	2, 350	(1) 2	15, 900	m · 1		
South Dakota	90	80, 900	2.3	415,000	1.8		
Гелаз	103	42, 600	2.8	655,000	2.9		
	14	12,000	. 8	143,000	. 6		
Utah	10	2, 410	.2	65, 200	.3		
/irginia	43	7, 840	. 8	97, 500	.4		
Washington	70	63, 600	4.2	2, 120, 000	0.4		
West Virginia	107	29, 300	1.9	266,000	1.2		
Wisconstn	59	16,000	1.1	641,000	2.8		
Wyoming	7	240	(1)	390	(1)		

¹ The sum of the figures in this column exceeds 3,468 because the stoppages extending across State lines have been counted in each State affected, but the workers involved and man-days idle were divided among the States.

† Less than 0.65 percent.

burgh department store strike was a major factor in keeping idleness at a high level in this State. The lumber strike placed Washington second with 9.4 percent of total idleness and Oregon in fifth place with 8 percent. New York and Ohio ranked third and fourth. No other State accounted for as much as 5 percent of the national figure. Idleness exceeded a million man-days in each of 7 States, in comparison with 9 in 1951 and 1953 and 15 in 1952.

⁵The decline in coal mining stoppages also affected the level of strike activity in these States in 1953.

New York recorded the largest number of stoppages in 1954-539 compared with 585 in 1953 and 600 in 1952. By contrast, only 387 stoppages were recorded in Pennsylvania compared with the high figures of 632 in 1953 and 692 in 1952.

Unions Involved

Unions affiliated with the AFL were involved in 3 out of 5 strikes in 1954; these stoppages, however, accounted for less than half of the total number of workers involved and man-days of idleness. (See table 6.) CIO affiliates were involved in 22 percent of the strikes accounting for almost a third of the workers and man-days of idleness. Approximately 14 percent of the stoppages, with 16 percent of the workers and 11 percent of idleness, involved unions that were not affiliated with either the AFL or CIO. Many of these, as in 1952 and 1953, were brief, localized stoppages in the coal-mining industry. Independent unions were involved in 4 strikes of 10,000 or more workers-the Engineers and Scientists of America at Sperry Gyroscope Co., the International Longshoremen's Association in 2 strikes in the Port of New York, and the United Mine Workers in bituminous coal mines in southwestern Pennsylvania.

National Emergency Disputes

The emergency machinery provided under the Labor Management Relations (Taft-Hartley) Act for the investigation of disputes was invoked by the President twice in 1954. Both controversies centered about a wage increase for production workers at Atomic Energy Commission facilities operated by Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp. One of the disputes-involving the CIO United Gas. Coke and Chemical Workers Union at AEC operations in Oak Ridge, Tenn., and Paducah, Ky.-resulted in strike action. The other, involving the AFL Atomic Trades and Labor Council at Oak Ridge National Laboratory and other facilities at Oak Ridge, Tenn., was settled without a work stoppage. In each case, the appointment of a board of inquiry followed rejection by the unions of earlier recommendations for wage adjustments by the Atomic Energy Labor-Management Relations Panel.7

Table 6 .- Work stoppages by affiliation of unions involved,

	Stop	pages b	eginning i	in 1954	Man-da	va idle		
Affiliation	Num-	Per-	Workers involved		during 1954 (all stoppages			
	ber	cent of total	Number	Per- cent of total	Number	Per- cent of total		
Total	3, 468	100.0	1,530,000	100.0	22,600,000	100.0		
American Federation of Labor Congress of Industrial	2, 112	60. 9	698,000	45.5	9, 130, 000	40. 5		
Organizations	786	22.1	480,000	31.3	6, 810, 000	30.2		
Unaffiliated unions	493	14.2	247, 000	16. 1	2, 450, 000	10. 9		
Single firm unions	17	. 5	9,740	. 6	29, 500	.1		
Different affiliations:								
Rival unions 1	40	1.2	9, 880	.6	68, 900	3		
Cooperating unions 1	11	.3	84, 400	8.8	4, 050, 000	17. 9		
No union involved	26	.7	3, 150	. 2	23, 200	m . 1		
Not reported	3	.1	90	(3)	1, 260	(1)		

¹ Disputes between unions of different affiliations—unions which have no established jurisdictional lines between them and are rivals in the same field.

³ The 83-day stoppage involving 7,900 lumber workers in the 5 Northwest States is in this group. The International Woodworkers (CIO) and the Lumber and Sawmill Workers (AFL) are the 2 cooperating unions.

⁴ Less than 0.06 percent.

Workers represented by the Gas, Coke and Chemical Workers stopped work on July 7 after rejecting a recommended 6-cent hourly across-theboard wage increase. The Board of Inquiry reported to the President on July 10 that a "state of crisis" had not been reached but that it seemed inevitable if the strike continued. On the same day the workers returned to their jobs after the Secretary of Labor and union officials developed a plan for a Government review of housing, health and community facilities, and other problems affecting the welfare of the workers and their families. The Secretary of Labor also announced that a study would be initiated to seek improvement of labor-management relations and strengthening of collective bargaining in the atomic energy field. A resumption of work postponed further action by the Government until August 11, when a Federal district court issued a temporary restraining order to avert a threatened strike. On August 27, the injunction was extended to the full 80-day "waiting" period provided under the Taft-Hartley Act but agreement had not been reached when the injunction was dissolved on October 30.

The CIO union and the company settled this dispute on November 7 when they agreed to the previously recommended 6-cent hourly basic wage

A substantial proportion of these were in the construction trades. 7 Although the members of both boards were identical, the boards functioned separately in each of the disputes.

increase, retroactive to April 15, 1954, with provision for an additional 4 cents effective January 15, 1955, together with observance on Friday of certain recognized holidays when they fall on Saturday. Meanwhile, on August 18, the AFL Atomic Trades and Labor Council had reached agreement with the company for a 6-cent hourly across-the-board increase retroactive to April 15, 1954, with wage reopening available to the union on January 15, 1955. The day after the CIO

settlement, the company and the AFL amended their agreement to make it conform with the provisions obtained by the CIO.

Three emergency boards were created by Executive Order in 1954 under the provisions of the Railway Labor Act. However, no major strikes took place in the railroad industry during 1954.

-Ann J. Herlihy and Daniel P. Willis, Jr.
Division of Wages and Industrial Relations

Union Contract Provisions for Paid Jury Leave

JURY SERVICE is basically a compulsory duty. To protect employees from loss of income while absent from work to serve as jurors, paid jury leave is provided by a number of collective bargaining agreements. Such provisions are akin to those providing pay allowances or bonuses to employees called for short-term military service ¹ in that they reduce a worker's financial sacrifice while he fulfills his civic duty.

An analysis of 1,736 agreements, effective during 1953 and covering 6,365,500 workers, showed that 317 or 18 percent had a provision assuring employees of an amount at least equal to their regular pay for the time spent in jury service. In most cases, the employer agreed to pay the difference between jury fees and workers' earnings. However, the practice of paying salaried employees while absent on jury duty is fairly common in American industry. In petroleum refining, communications, and utilities, over half of the agreements studied provided paid jury leave.

Amount of Pay

Of the 317 agreements providing paid jury leave, 223 compensated employees for the difference between the fees received for jury service and their regular wages (see table).

An employee who is required to be absent from work for jury service shall receive whatever straight-time pay he would have otherwise received up to and including 40 hours in any 1 week, less the amount of jury pay which he received for the same period . . . In 21 agreements employees were permitted to retain their court fees in addition to receiving their regular pay. This more liberal type of provision was found almost exclusively in agreements in communications, utilities, and petroleum refining.

In the event an employee is called for jury service, he will receive for time so spent during his scheduled working hours his normal earnings without deduction for jury fees received, if any.

In 73 agreements the exact amount to be received by the employee was not clearly specified. Such agreements provided that an employee would receive "time off with pay"; would "suffer no financial loss"; or would "get his regular rate." Three-fourths of the agreements providing paid jury leave in the communications industry had this type of clause. Besides providing pay for actual jury service, a few agreements stipulated pay for time spent in qualifying for jury duty.

Qualifications for Jury Leave

Forty-two agreements specifically required that the employee return to his job upon completion of jury service in order to collect jury-leave pay. An additional 17 agreements had more detailed stipulations as to when the worker was to report: Some required that employees report if dismissed in time for 4 or more hours of work; others, if they could work 2 or more hours; still others, if dis-

* See Time Off With Pay. (In Management Record, National Industrial Conference Board, New York, July 1954, p. 258.)

¹ See Military-Service Payments in Union Agreements, 1953, Monthly Labor Review, July 1954 (p. 771).

[•] The agreements in the study, current as of January 1, 1953, or later, were selected from the Bureau of Labor Statistics current file of union contracts on the basis of industry, union, and geographic representation. Agreements for the sirline and railroad industries are not filed with the Bureau.

Paid jury leave provisions in collective bargaining agreements, by industry group, 1953

	Numbe	er studied		er with		nt with	Nu	mber co	vered by	provisio	ns allow	ing—
Industry group		Work-		Work-			Difference be- tween regular pay and jury fee		Regular pay plus fee		Other 1	
	Agree-		Agreements	(thou- mada)	Agree-	Work- ers	Agreements	Work- ers (thou- sands)	Agreements	Work- ers (thou- sands)	Agreements	Work- ers (thou- sands)
All industries	1, 736	6, 365. 5	317	1, 150. 8	18.0	18.0	223	625. 8	21	148.9	73	385.1
MANUFACTURING	1, 267	4, 304. 3	224	702.3	18.0	16.0	156	564. 8	7	37. 3	29	100. 2
Food and kindred products	120		45	106.0	38.0	34.0	45	106.0				*****
Tobacco manufactures Textile-mill products A pparel and other finished textile products.	113	32.7 182.0	16	50.6	14.0	28.0	16	50. 6	*******	*******		
Lumber and wood products (except furniture)	54 26 32 50 46 70	364. 4 21. 6	2	.3	8.0	1.0	2	.3	******	********		
Furniture and fixtures Paper and allied products Printing, publishing, and allied industries.		55. 1 95. 9 46. 6	6 3	9.4	12.0	10.0	6	9.4			2	
Chemiculs and allied products Products of petroleum and coal	70 24 20	97.8 67.2	28 17	50.0 58.7	40.0 71.0	81.0 87.0	25 5	47. 9 6. 4	6	36. 9	6	15.4
Rubber products Leather and leather products Stone, clay, and glass products	30 50	131. 7 53. 0 102. 8	3 6	6.1 2.8 19.0	15. 0 10. 0	5.0 5.0 18.0	3 3 4	6.1 2.8 7.1			2	11.
Primary metal industries Fabricated metal products	99	596. 9 178. 9	11	12.7	11.0	2.0	9 7	10. 7 14. 5			2	2.0
Machinery (except electrical) Electrical machinery Transportation equipment	164 78 114	341.6 375.5 1, 162.0	28 28 10	70. 3 109. 5 87. 1	14. 0 36. 0	21.0 45.0 7.0	21 18 10	69. 0 105. 3 87. 1			10	64.
Instruments and related products. Miscellaneous manufacturing	24	44.0	5 10	24. 2	9. 0 21. 0 23. 0	55.0 44.0	5 8	24. 2 16. 6				3.0
NONMANUFACTURING	460	2,061.2	93	457, 5	20.0	22.0	35	61.0	14	111.6	44	284. 9
Mining, crude-petroleum, and natural-gas production.	33	514.2	3 7	4.2	9.0	1.0					3	4.2
Transportation ² Communications Utilities: electric and gas	85 63 60	218. 2 504. 8 154. 9	36 34	17. 4 330. 6	8.0 57.0 57.0	8.0 65.0 53.0	7 2 15	17. 4 1. 5 19. 5	7 7	96.1 15.5	27 12	233. 0
Wholesale trade	21 63	21.8	6 5	3,9	29.0 8.0	18. 0 15. 0	4 5	3.0		10. 0	2	, 9
Hotels and restaurants	25 61	105.9	2	1.1	3.0	1.0	2					*******
Construction Miscellaneous nonmanufacturing	53	273.0	******			*******	*******			*******	*******	

¹ Agreements were not clear as to whether pay for jury leave was to include or exclude jury fees. They refer of to "time off with pay." "guaranteed pay for time lost." "pay for time spent on jury duty," and similar provisions without clarifying statements regarding jury fees.

missed before noon. Some agreements specified that employees excused from jury duty for 1 or more days were to come to work during that time.

Two agreements specified that workers could work part time during time outside of jury service if regular work were available.

Employees shall be permitted to work part time for the company outside their regular jury service if the nature of their regular work available is such as will permit this practice. Such employees shall be paid their regular straight-time wages for such time actually worked. During the time employees are absent on jury duty, the company will make up to them the difference, if any, between the jury pay and their straight-time wages from the company. . . .

Under some agreements night shift employees serving on jury duty were to be assigned to the day shift during their period of service. Thus, as nominal day shift workers they were eligible for paid jury leave.

In 67 agreements evidence of jury service and receipt of fees, or certification by a judge or court officer were the most commonly cited provisions qualifying an employee to collect pay for time spent serving as a juror.

. . . An employee who is absent from the plant because of jury duty shall, within 2 weeks after completion of said duty, be paid by employer . . . upon presentation of proper evidence as to jury service and the amount of compensation received . . .

Thirty-nine contracts required prior notice to the employer.

. . . Any employee who is called for jury duty, and who before reporting for jury duty, gives the company 5 days prior notice thereof, shall be paid by the company for each day he is paid for jury service . . .

Excludes railroad and airline industries.

Eligibility for paid jury leave binged on length of service in some cases.

. . . All regular full-time employees who have 6 months or more of continuous service shall be reimbursed for jury duty.

Other Provisions

Because it is difficult to foretell the duration of jury service, most agreements contained little on the subject of time limitations. However, 34 agreements placed a limit on either the number of days or the number of calls to jury service, or both, for which employees could be paid during a specified period of time.

When an employee has been absent from work because of jury service for a period not in excess of 10 working days, he shall be paid his regular rate of pay and will not be required to reimburse the company with his jury pay.

. . . The company shall in no event be obligated to make any payment under this provision with respect to jury service more frequently than once in any 24 months, nor for jury service exceeding 4 weeks on any one call . . .

In the majority of agreements no mention was made of the treatment of time spent on jury duty in the computation of overtime pay eligibility. Thirteen contracts allowed time out for jury duty to be considered as time worked for overtime pay purposes; 15 explicitly prohibited including time spent on jury service in total time worked for the purpose of overtime pay computation.

Some contracts contained specific provisions prohibiting pay for jury duty performed while an employee is on vacation, on layoff or leave status, or on holiday leave. However, a few contracts allowed holiday pay to employees engaged in jury service, if such service occurred during a week in which there was a paid holiday.

Pay for serving as a court witness in addition to pay for jury duty was provided in 50 contracts. In most instances the amount of pay was the same for both; where there was a difference, compensation for jury duty was higher than for other court service.

> —Dena G. Weiss Division of Wages and Industrial Relations

Wages in Japanese Mining and Manufacturing

Workers in Japanese mining and manufacturing industries had average monthly cash earnings of 17,166 yen and 15, 322 yen, respectively, in 1953, when employees in these industries represented approximately 20 percent of total employment. A substantial proportion of the average earnings consisted of special cash payments, principally midyear and year-end bonuses. The earnings figures do not include such noncash income as payments in kind and welfare facilities operated by employers.

Wages differed markedly among the various industry groups studied; they were lowest in apparel industries and highest in products of petroleum and coal. These variations are attributable principally to differences among industries in the sex composition of the labor force, the average size of establishments, the extent of unionization, and certain provisions of the Japanese labor standards law.

All statistics in this article are based on official data of the Japanese Ministry of Labor, except where otherwise specified. The United States Department of Labor is not in a position to appraise the adequacy of this data.²

Wage Structure

Cash earnings, as reported by the Japanese Labor Ministry, represent the sum of contract cash earnings and special cash payments, both of which include allowances for various purposes. All firms do not pay each of the allowances described below, but average monthly cash earnings for an entire industry do include most or all of these payments. In September 1953, the relative

i Fuchange rates during 1963 were 360 yen to the United States dollar.

It appears that the Japanese have a counterpart for many United States Government statistical series.

importance of the various components of cash earnings for manufacturing workers was as follows:

Elemente	Percent of total
Total cash payments	100.0
Special cash payments 1	12. 9
Contract cash earnings	87. 1
Basic wages	56. 3
Incentive wages	12.9
Supplementary payments for living costs.	6. 1
Overtime	10. 7
Nonwork allowance	1. 0
Other payments	0. 1

¹ Consist primarily of midyear and year-end bonuses.

Contract Cash Earnings. The principal elements of contract cash earnings are defined as follows:

1. Basic wages are fixed wages paid for work within scheduled hours which differ for individual workers on the basis of such factors as age, education, seniority, experience, ability, and type of work performed. Basic wages also include such payments as "price" and "temporary" allowances provided their amount either is the same for all workers or is determined by the basic wage, as well as "meal" or "attendance" allowances if they are paid in proportion to the number of days worked.

 Incentive wages are pay granted to regular workers who were at work more than a specified number of days during a specified period. They also include pay given for the efficiency of an individual or group.

 Overtime is the allowance paid for overtime work, holiday work, midnight work, and shift work.

Supplementary payments for living costs consist primarily of dependency allowances, but also include allowances for commuting, housing, income tax, and social insurance premiums.

Nonwork allowances include vacation pay and other pay for periods during which no work is performed.

Special Cash Payments. Special cash payments vary from year to year; in 1953, for manufacturing workers, they were 12.9 percent of total cash earnings. They consist principally of semiannual bonuses but include, in addition, such payments as marriage allowances or retroactive wage payments

resulting from new collective bargaining agreements. The amount of the bonuses is frequently negotiated by collective bargaining and often is the basis for strikes.

Effect on Relative Wages of Men and Women. Although the Labor Standards Law prohibits wage discrimination against women because of their sex, the wage structure results in far higher payments to men than to women factory workers, most of whom are young, unmarried, and without dependents. The allowances can total more than the basic wage in the case of older men workers with many dependents. As a result, in 1953, the average woman factory production worker earned only 41 percent as much as the average man worker.

Noncash Elements. Noncash income received by workers has fallen very sharply since the Japanese labor standards law was passed in 1947. Article 24 of that law provides that "wages must be paid in cash and in full [except where] otherwise provided for by law or order or labor agreement." 3 (This would permit such wage deductions as, for example, union dues under the terms of a collective bargaining agreement and taxes.) However, information published by the Labor Ministry and a recent study prepared by the Japanese Daily Labor Press, Inc., indicate that noncash income is still significant, although its net effect is difficult to evaluate. The noncash elements of the wage structure are of three types: (1) payments in kind, (2) welfare facilities, and (3) the Government rice allocation, described below.

1. Payments in kind have become the least important of the three elements, owing to the statutory requirement for cash payment of wages. According to a study by the Labor Ministry which was cited in the Daily Labor Press, in 1950 payments in kind were made to only 6 percent of all Japanese industrial workers and averaged only 6 percent of their total monthly pay. Textile industry workers received the highest total payments in kind which amounted to 7 percent of their total monthly wages. However, only 10 percent of all textile workers receive such payments.

 Welfare facilities of some type were operated by about 78 percent of Japanese manufacturing firms in November 1949, according to a study made by the Ministry of Labor.⁴ The proportion

⁸ The agreement must be between the employer and a trade union or other persons representing the majority of workers at the working place.

^{*} Yearbook of Labor Statistics, Tokyo, 1980 (pp. 338-336).

of these firms providing the most prevalent types of facilities is shown below:

Type of facility	Percent	of firma
Dwelling		80
Medical treatment, sanitation, or nursery		68
Economic 1		47
Culture, recreation, or physical training		44

Includes one or more of the following: food supply, loan facilities, sales, provision manufacturing, and facilities for agriculture and pasture (sic).

These facilities cost the employers 7 percent of workers' total cash earnings. The corresponding figure for the textile industry was 12 percent. An additional 5 percent cost went for social insurance contributions required by law. The corresponding costs for mining were higher. Thus the cost of these welfare facilities in mining was 25 percent with an additional 9 percent for social insurance contributions required by law.

Since 1950, when these cost estimates were made, social insurance coverage has become more comprehensive and costs have increased. Though no recent overall estimates of social security costs are available, the cost to employers under the Japanese Welfare Pension Insurance Law (as amended to June 1951) alone are 4.7 percent of the remuneration for men workers, 2.75 percent for women workers, and 6.15 percent for miners. In addition to the compulsory coverage provided by this law, it is common practice for employers to pay retirement allowances when employees retire either of their own will or for the employer's convenience.

3. The Government rice allocation is made under a special supplementary food allocation program for manual laborers "for the purpose of enhancing their will to work and stabilizing their daily livelihood," a program established in 1946, when severe food shortages existed as a result of the war. Now only rice is so distributed. The distribution is made in proportion to the physical effort required in various laboring job categories. The average allocation is 280 grams per head per day. The Ministry of Labor found that, in April 1953, 40,000 tons of rice were distributed to over 6.7 million laborers.

Wage Levels and Employment

Distribution of Employment. In 1953, Japan had a labor force consisting of 39.7 million persons aged 14 and over, of whom 59 percent were males.

Table 1.—Employment in Japanese mining and manufacturing establishments with 30 or more workers, year-end 1953, by industry group and sex

	Total	M	en	Wor	Rein-	
Industry group	thou-	Num- ber (in thou- sands)	Percent of total	Num- ber (in thou- sands)	nf lo	im- por- tance (per- cent)
Mining	466 2, 713	424 1, 820	91 67	41 894	9 33	100.0
Food and kindred products	129	80	62	49	38	4.8
Tobacco	23	11	48	12	52	.8
Textile-mill products. Apparel and other finished prod-	600	167	28	434	72	22.1
ueta	48	13	27	35	73	1.8
Lumber and wood products	64	50	78	14	22	2.4
Furniture and fixtures	17	14	82	3	18	.6
Paper and allied products Printing, publishing, and allied	86	67	78	19	22	8.2
industries	118	95	81	23	19	4.3
Chemical and related products	269	200	78	61	22	9.9
Products of petroleum and coal	18	18	83	3	17	.7
Rubber products	62	32	52	30	48	2.3
Leather and leather products	10	8	80	2	20	.4
Stone, clay, and glass products	123	90	78	33	27	4.8
Primary metal industries	265	244	92	21	8	0.7
Fabricated metal industries	80	64	80	16	20	2.9
Machinery Electrical machinery, equip-	263	214	88	26	12	9.0
ment, and supplies	198	140	72	54	28	7.1
Fransportation equipment Medical, scientific instruments:	270	247	91	23	9	10.0
photographic and optical goods.	54	39	72	15	28	2.0
Miscellaneous manufacturing	41	21	51	20	49	1.5

Relative importance of employment in each industry in terms of percent of total manufacturing employment.

NOTE: Because of rounding, sums of individual items do not necessarily add to totals.

Source: Year Book of Labor Statistics, 1953, Tokyo, Japanese Ministry of Labor, Division of Labor Statistics and Research, 1954 (p. 21).

Over 56 percent of the employed labor force of 39.25 million was engaged in nonagricultural pursuits; 17.2 percent worked in manufacturing industries and mining accounted for 1.6 percent. Employment in mining and manufacturing establishments employing 30 or more workers at the end of the year 1953, classified by industry group and sex, is shown in table 1.

Textile-mill products, apparel, and tobacco were the only major industries in which women employees outnumbered men, though in miscellaneous manufacturing and rubber products men workers were in the majority by very small margins. Textile-mill products was the industry group with the largest number of employees, about 600,000, approximately three-fourths of whom were young women. At the other extreme was leather and leather products with only 10,000 workers.

Wages. Average monthly earnings for the most recent year available are used in table 2, in order to make proper allowance for the substantial midyear and year-end bonuses which are an integral part of the Japanese wage structure. The data cover both production and nonproduction workers in establishments reporting 30 or more regular employees.

The data presented here are not intended for use in comparisons of wages of workers in Japan with those in the United States. Available wage data are not adequate for valid international comparisons. The problem of comparability is further complicated by the fact that workers' noncash income, which is not susceptible to precise measurement, is an important factor in both U.S. and Japanese wage structures. Conversion of wage rates from Japanese yen to United States cents by means of exchange rates does not, in most cases, make possible a valid comparison of purchasing power of earnings in Japan with those in the United States, principally because of vast differences in buying habits between the two countries. As pointed out by the Textiles Committee of the International Labor Organization in its 1952 report on textile wages, "in the case of countries with radically different modes of living, precise statistical comparison is, indeed, inherently impossible or

meaningless." The average hourly earnings shown in table 2 were converted to United States cents in order that the reader might have, not a precise comparison, but an idea of the order of magnitude of Japanese wage rates in United States currency.

Since most Japanese women workers are young, unmarried, and unskilled, their earnings are in the lower brackets. Therefore, the wage levels in an industry are usually inversely related to the proportion of women employed. Thus, in petroleum and coal products, with a labor force composed principally of men in relatively skilled jobs, workers' average hourly earnings were the highest found in any industry group. However, wages of women production workers were lower in relation to those of men than in any other group. Workers in apparel and textiles had the lowest monthly cash earnings, due principally to the fact that about three-fourths of them were women.

However, the tobacco industry-a government monopoly-had the second highest average hourly earnings among the major industry groups despite the fact that slightly more than half of the workers

Table 2.—Average cash earnings and hours of regular workers in Japanese mining and manufacturing establishments of 30 or more employees, and women's earnings as a percent of men's earnings, by industry group, 1953

	month	ly earn-	Ave hou earn	urly			Average monthly earn- ings and hours													
	Cash	Cash	Cash	Cash	Cash	Cash	Cash	Cash	Cash	Cash		U. S.	cents 1	Sex wage ratio 3	Industry group	Cash		U. S. 6	cents 1	Sex wage ratio
	earn- ings worked Major					Hours worked	Major groups													
Total	16, 741	194. 4	23.9	*****	0==00=	All manufacturing—Continued Electrical machinery—Continued														
Mining	17, 166 17, 408	191. 5 185. 0	24.9	26.1	45	Communication equipment and related products	15, 714	195.2		22. 4										
Conl	17, 233	198.9	21.6	24.7	41	Medical, scientific instruments, photographic and optical goods:				-										
All manufacturing Products of petroleum and coal	20, 699	190, 0	30, 2	*****	36	watches and clocks	16, 509	195. 3	23.5		83									
Primary metal industries	18, 360 20, 501	173.6 196.2	29.4			Stone, clay, and glass products Printing, publishing, and allied	16,050	195, 7		*****	36									
Smelting furnaces, steel works, and rolling mills	22, 213	196.1		31.1		Industries Machinery, except electric	17, 213	210.7	22.7	*****										
Transportation equipment	10, 005	197.0	28.1	01. 1	47	Textile machinery	15, 965	206. 8	21.8	21.6										
Motor vehicles and motor ve-			-			Leather and leather products	14, 119	191.7	20. 5	*****										
hicle equipment Steel shipbuilding and repair-	21,600	198.3	******	31.0	*****	Fabricated metal products Food and kindred products	14, 918	205, 4	20. 2 19. 7	*****	7.0									
ing	21,027	197.9	******	29.5	*****	Rubber products	13, 667	192.5	19.7	*****	7.7									
Raifroad equipment Paper and allied products	20, 400	204.5	27.8	21.0	37	dustries	10, 694	195.7	15.2		14									
Pulp, paper, and paperboard	-		211.0		-	Furniture and fixtures	10, 630	202. 2	14.6		4									
mills	21, 775	204.6	*****	29.6	000000	Lumber and wood products	9, 820	201. 4	13.6		51									
Chemical and related industries. Ammonium sulphate industry	17, 479 20, 812	181. 1 171. 0	26.8	33.8	48	Textile-mill products Cotton and rayon staple spin-	9, 630	196.2	13.6		50									
Synthetic fibers	14, 124	186. 7	******	21.0	******	ning mills	10, 743	189. 2		15.8										
Drugs and medicines	15, 876	180, 0		24. 5		Broad-woven cotton and spun			-	-										
Electrical machinery Electrical generating, transmission, distribution and indus-	17, 434	196.0	24.7	*****	46	rayon fabric mills. Silk reeling plants. Apparel and related finished prod-	8, 620 6, 810	201. 8 187. 9	******	11.9										
trial apparatus	19, 187	197. 5		27.0		Apparel and resided finished prod-	7, 913	199.7	11.6		4									

SOURCE: Yearbook of Labor Statistics, 1963, Tokyo, Japanese Ministry of Labor, Division of Labor Statistics and Research, 1984. Data on average monthly eash earnings (pp. 87-162); average monthly bours worked (pp. 67-72).

Converted on basis of 360 yen=\$1.00. Ratio for production workers of women's to men's cash earnings

were women. Their wages were about two-thirds of the average for men—by far the highest ratio found in any industry.

Factors Affecting Wage Levels

Establishment Size. The fact that workers in large firms earn higher wages than those in small firms is clearly apparent from table 3, which shows the relationship between average earnings in eight different sizes of manufacturing establishments. There are several reasons for the direct variation between wages and plant size. The larger firms are stronger financially and can pay higher wages to attract better qualified workers. Government inspection forces are better able to check compliance with the labor-standards law in larger plants and therefore there are fewer violations of the wage provisions of that law. Also, the larger firms are more apt to be unionized and, as indicated below, Japanese unions have been aggressive in pressing demands for higher wages.

The lowest wages paid to Japanese workers are in the so-called "cottage industries" usually performed in the home by women as "sidework." Thus, a wage survey of silk scarf and handkerchief hemming workers in the Yokohama area, in the spring of 1953, indicated total wages ranging from 2.1 to 2.7 cents per hour.⁵

Japanese Labor Standards Law. Many provisions of the Japanese labor standards law relate to working conditions. However, for purposes of this report, the wage and hour provisions of the law have greater relevance. Those having the most pronounced effect on wage levels stipulate:

 A basic 48-hour, 6-day workweek, with overtime and holiday pay at time and a quarter.

 A basic annual paid vacation of 6 days for workers who were employed continuously for 1 year, with progressively more days of vacation for workers with greater seniority.

Employers must assure pieceworkers of a minimum wage proportional to the number of hours worked.

4. Children under 15 years of age cannot be

Table 3.—Average cash wages of Japanese workers in manufacturing, by size of establishment, in yen and as percent of average for all establishments, May 1953

	Average cash wages					
Size of establishment (number of employees)	Amount (in yen)	As percent of average for all establishments				
All establishments	12, 881	100				
9 and under	8, 008	10				
10-19	8, 940	66 69 73 80				
0-40	9, 408	73				
0-90	10, 264	80				
100-199	11, 511					
00-490	12, 902	100				
00 and over	15, 994	124				

¹ Does not include semiannual bonuses in most instances and therefore should not be considered to represent total cash earnings.

SOURCE: Yearbook of Labor Statistics, 1953, Tokyo, Japanese Ministry of Labor, Division of Labor Statistics and Research, 1964 (p. 211).

employed, except in certain specified occupations where they may do light work outside of school hours.

 Wage discrimination is specifically prohibited "by reason of the worker being women" (sic), and the types of work which may be performed by women and minors are limited.

In addition, the labor standards law makes it possible for the government to set minimum wages through central and local wage councils. The Central Wage Council, established by the statute, in July 1951 recommended that minimum wages be established on a dual system (one designed to cover workers generally and the other to cover workers in lower wage industries); that as a beginning, they cover workers in lower wage industries employing the so-called home workers; and that such minimum wages be set in accordance with "the prevailing economic conditions of Japan." Although no such wages have yet been established, the Central Wage Council has ordered special studies of four low-wage industries (silk and rayon weaving, furniture and fixtures, handmade paper manufacturing, and home silk reeling), with a view to recommending minimum wage standards for each in accordance with conditions prevalent in each industry.

Collective Bargaining. In 1953, the approximately 30,000 trade unions in Japan had about 6 million members. The largest trade union center is the leftwing Sohyo (General Council of Japanese Trade Unions). It competes for membership with Zenro (Japan Trade Union Congress), a rightwing Social-

^{*} United States Foreign Service report, June 1, 1953.

[•] Law No. 49 of April 7, 1947, from Japan Labor Code, 1922, Tokyo, Ministry of Labor, 1983. Domestic and family workers, who are among the lowest paid, are excluded from the protection of this act.

Table 4.—Percent change in cash wages and industrial activity, Japanese manufacturing and mining, 1934-36 and 1947 to 1953.

[All increases unless otherwise noted]

Economic series	Percent	change,	Percent change,		
	1934-36	to 1953	1927 to 1953		
a contonne series	Manu-	Min-	Manu-	Min-	
	facturing	ing	facturing	ing	
Wases. Real wages - Production Employment. Productivity.	30, 604 7 60 43 25	23 77 -27	880 237 355 3 340	706 176 84 12 110	

¹ Based on data from Monthly Labor Statistics and Research Builetin, October 1984, Japanese Ministry of Labor.
² The consumer price index moved up 28,516 percent from 1984–36 and 193 percent from 1947.

ist labor center.⁷ The Sohyo unions are very aggressive in their demands, which include political as well as economic objectives. However, though not as vocal as Sohyo, the Zenro unions have led a determined fight for better working conditions.

The Austerity Program. In the attempt to correct Japan's unfavorable balance of trade and its critical dollar shortage, the Government is conducting an anti-inflationary austerity program. The Zenro unions generally concede the necessity for such a program and do not request wage increases which they consider inflationary. However, many of the Sohyo unions continue to press their demands for substantial bonuses and wage increases. Undoubtedly the austerity program has had a depressing effect on wage levels.

Long-Term Economic Trends

In evaluating changes in the Japanese economy since the prewar and the early postwar periods, it should be remembered that in 1947 economic activity was at a relatively low level, compared with the prewar period. Consequently, changes from 1947 to 1953 are much greater than those shown by comparing 1953 levels of economic activity with the prewar years, except in the case of nominal wages. (See table 4.) The wage index on the prewar base has little meaning in terms of purchasing power because, in addition to inflation, Japan has devalued its currency several times since 1934–36.

—Boris S. Yane Division of Foreign Labor Conditions

*See Zenro—A New Anti-Communist Labor Center in Japan, Monthly Labor Review, August 1954 (p. 883).

Union Wage Scales of Local-Transit Operating Employees, 1954

Union wage scales of operating employees in local-transit systems in cities of 100,000 or more population rose 5 percent, or about 9 cents an hour on the average, between July 1, 1953, and July 1, 1954. During this period, the wage rates of more than nine-tenths of the organized operating employees included in the Bureau of Labor Statistics' annual survey of union scales in the local-transit industry were adjusted upward; advances typically ranged from 5 to 15 cents an hour. On July 1, 1954, union wage scales averaged \$1.85 an hour for operators of local transit equipment.²

Standard workweeks varying from 40 to more than 48 hours were reported for seven-eighths of the workers studied. About 3 of every 4 workers, however, were covered by labor-management contracts which specified a 40-hour straight-time workweek.

! Union scales are defined as the minimum wage scales or maximum schedules of hours agreed upon through collective bargaining between unions and employers. Rates in excess of the negotiated minimum, which may be paid for special qualifications or other reasons, are not included.

The information presented in this report was based on union scales in effect on July 1, 1954, and covered approximately 85,000 local-transit operating employees in 52 cities with populations of 100,000 or more. Trackmen and maintenance workers were not included. Operating employees of municipally owned transit systems were included if unions acted as the bargaining agents. Data were obtained from local union officials, primarily by mail questionnaire; in some instances, Bureau representatives visited local union officials to obtain the desired information.

Mimeographed listings of union scales are available for each of the 52 cities included in the survey. A forthcoming bulletin will contain more detailed information on the industry.

The current survey was designed to reflect union wage scales of localtransit operating employees in all cities of 160,000 or more population. All cities with 500,000 or more population were included, as were most cities in the population group of 250,000 to 500,000. The cities in the 100,000 to 250,000 group selected for study were distributed throughout the United States. The data for some of the cities in the two smaller size-groups included in the study were weighted in order to compensate for the cities which were not surveyed. In order to provide appropriate representation in the combination of data, each geographic region and population group was considered separately when city weights were assigned.

² Average hourly scales, designed to show current levels, are based on all scales reported in effect on July 1, 1984, with each different scale weighted by the number of union members receiving that rate. These averages are not designed for precise year-to-year comparisons because of fluctuations in membership and in the elsesifications studied. Average changes from July 1, 1983, to July 1, 1984, are based on comparable quotations for the various classifications in both periods, weighted by the membership reported for the current (1984) survey. The index series, designed for trend purposes, is similarly constructed.

Data from the 1953 survey appeared in the Monthly Labor Review for January 1954 (p. 50).

Trend of Union Scales

The Bureau's index of union hourly wage rates of local-transit operating employees has advanced steadily since it was initiated in 1929, except in the years from 1931 through 1934. The annual rate of increase during the 26-year period averaged 3.9 percent, although it varied considerably from year to year. On July 1, 1954, the index of union hourly wage scales of local-transit operating employees was 36.4 percent above the average for the 3 years 1947-49 (table 1).

In general, rate revisions between July 1, 1953, and July 1, 1954, were the result of negotiations on contract expirations or reopenings, as well as of previous negotiations which provided interim increases. During the year, union scales of local-transit operating employees on 1- and 2-man surface equipment increased by an average of 9 cents an hour (5 percent) and those of elevated and subway operators, 8 cents an hour (4½ percent).

Nearly 95 percent of the local-transit operating employees covered by collective bargaining arrangements in cities of 100,000 or more population received upward adjustments in their wage scales between July 1, 1953, and July 1, 1954. Of every 100 transit workers affected by the changes, 11 received advances of less than 5 cents an hour, 54 received from 5 to 10 cents, and 26 received from 10 to 15 cents.

The proportions of workers affected as well as the amount of pay increases varied by type of equipment operated. All motormen and conductors of 2-man cars, all elevated and subway operators, and more than 90 percent of the operators of 1-man surface equipment had scale increases in the year ending July 1, 1954. Among the motormen and conductors of 2-man cars, 40 percent received increases amounting to 6 cents an hour and 34 percent of the group obtained 13 cents. Hourly increases of 6 or 6½ cents were applicable to almost 60 percent of the elevated and subway operators and advances of 11 cents an hour were registered for 32 percent. Upward adjustments for operators of 1-man surface equipment ranged from 1½ cents to more than 30 cents an hour, being from 5 to 9 cents an hour for half of the workers,

¹ This so-called top rate actually becomes the employee's basic scale after a specified period of employment with the company. It is not a maximum rate in the sense that the company may not pay more. less than 5 cents for a tenth, and 15 cents or more for another tenth.

Increases during the year represented gains of 3 to 5 percent for nearly half the transit workers included in the study. For a fifth of the workers, increases were from 5 to 7 percent and for almost a fifth, 7 percent or more.

Wage-Scale Variations

Hourly pay scales for local-transit operating employees are generally graduated on the basis of length of service. Typically, labor-management agreements provide for an entrance rate, one or more intermediate rates, and a top rate. Although the time interval between rate steps varies among cities, the entrance rate generally applies to the first 3 or 6 months of employment. The top rate is usually reached after 1 year's service. In some cities, however, local-transit agreements specify a single rate, irrespective of length of employment.

Entrance rates for 1-man car and bus operators varied from \$1.10 in Charlotte, N. C., to \$1.93 in Chicago and Seattle. Top wage scales for these operators ranged from \$1.35 in Charlotte to \$2.13 in Boston.

Hourly wage scales for all local-transit operating employees studied averaged \$1.85 on July 1, 1954; this was also the average for the operators of 1-man and 2-man equipment. Elevated and subway operators, who represented slightly less than 10 percent of all transit workers studied, averaged \$1.90 an hour.

Wage scales for nearly 70 percent of the workers covered by the study were between \$1.75 and \$2

Table 1.—Indexes of union hourly wage rates of localtransit operating employees, 1929-54, [Oct. 1, 1947-48-49-100]

Date	Index	Date	Index
1929: May 18	52. 4 52. 9 52. 9 51. 9	1942: July 1 1943: July 1 1944: July 1 1945: July 1 1946: July 1	64. 68. 69. 69. 81.
1934: May 15 1935: May 15 1936: May 15 1937: May 15 1938: June 1 1939: June 1 1940: June 1	50. 4 52. 3 52. 7 55. 2 56. 8 57. 2 57. 9	1947: October 1 1948: October 1 1949: October 1 1960: October 1 1951: October 1 1952: October 1 1953: July 1	92. 4 101. 1 106. 6 110. 6 118. 1 127. 6

I Not available

an hour; 11 percent had hourly scales of \$2 or more; and 3 percent had scales below \$1.50. A similar pattern prevailed for operators of 1-man buses, who accounted for about 85 percent of all the transit workers studied. Virtually all motormen and conductors on 2-man cars had rates ranging from \$1.75 to \$1.95 an hour, with approximately half of them receiving from \$1.80 to \$1.90.

City and Regional Rate Differentials

As indicated earlier, union hourly wage scales varied widely among the 52 cities studied. Rates averaged from \$1.34 in Charlotte to \$2 in Seattle. Averages of less than \$1.50 were reported for Oklahoma City, Knoxville, and Little Rock, while average rates of \$1.95 or more prevailed in Pittsburgh, Boston, and Milwaukee. Among the other cities, the rate levels varied between \$1.50 and \$1.75 in 21, between \$1.75 and \$1.90 in 12, and between \$1.90 and \$1.95 in 11.

Scale adjustments during the year affected some transit workers in all but five of the studied cities. Increases of 5, 6, and 8 cents an hour were most frequently reported. Upward changes of 20 cents or more were recorded in 5 cities; in 4 of the cities, these larger advances were attributable partly to reductions in the workweek.

Average scales for the two largest city-size groups were virtually identical: \$1.91 for the 5

Table 2.—Average union hourly wage rates of local-transit operating employees, by region, July 1, 1954

	Average rate per hour—								
Region ¹	All workers	Operators of 1-man ears and buses	Motormen and con- ductors of 2-man cars	Elevated and sub- way op- erators					
United States	\$1.85	\$1.85	81. 85	\$1.90					
New England Middle Atlantic Border States	1, 85 1, 91 1, 82	1, 84 1, 91 1, 82	1. 78	1. 86 1. 90					
Southeast Great Lakes Middle West Southwest	1. 54 1. 90 1. 77 1. 64	1. 54 1. 90 1. 77 1. 63	1. 89	1. 85					
Mountain Pacific	1. 67 1. 89	1. 67 1. 89	***********						

¹ The regions in this study include: New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; Middle At-Massachusetts, New York, and Fennsylvania; Border States—Delaware, District of Columbia, Kentucky, Maryland, Virginia, and West Virginia; Seatheast—Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; Grest Lesse—Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; Middle West—Iown, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; Southseet—Arkansas, Louislana, Oklahoma, and Texas: Mountain—Arisona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; and, Paethe—California, Nevada, Oregon, and Washington.

cities with 1,000,000 or more population and \$1.90 for the cities with 500,000 to 1,000,000 population. These averages were 5 to 6 cents an hour higher than that for the next smaller size-group (250,000 to 500,000 population) and slightly more than 25 cents an hour higher than for the group with 100,000 to 250,000 population.

The level of rates for individual cities within each population group showed wide variations from the group averages. The spread between the highest and the lowest city averages ranged from 9 cents in the largest size-group of cities to 47 cents in the smallest size-group.

Regionally, average rates for local-transit operating employees ranged from \$1.54 in the Southeast to \$1.91 in the Middle Atlantic States. Rate levels in the Great Lakes and Pacific regions also exceeded the \$1.85 national average. Wage levels for 1-man car and bus operators were identical with those for all types of conveyances combined in all but two regions. In the 4 regions in which 2-man car operations were reported, scales averaged \$1.89 in the Great Lakes and Pacific regions and \$1.78 in the Middle Atlantic and Southwest regions (table 2).

Standard Workweek

Workweeks, in terms of a fixed number of hours for which workers were paid at straight-time rates, were established in contracts covering 88 percent of the transit workers included in the study. Straight-time weekly hours were not reported for 10 of the covered cities. For workers in the other 42 cities, straight-time hours averaged 41.3 on July 1, 1954, compared with 42.4 on July 1, 1953, largely because of reductions in the workweek affecting either some or all of the transit operating workers in 10 of the cities.

A 40-hour workweek applied to 62 percent of the 1-man car and bus operators, to 80 percent of those operating 2-man equipment, and to 94 percent of the elevated and subway operators. Workweeks of 48 hours were in effect for 8 percent of the operators of 1-man cars and buses and for 16 percent of those on 2-man cars.

> —James P. Corkery Division of Wages and Industrial Relations

The Effect of Plant Size on Industrial Relations Practices

The influence of plant size as a factor in industrial relations is difficult to isolate and to assess, according to the second report 1 of Princeton University on the industrial relations characteristics of manufacturing plants in the Trenton, N. J., area. Although the report makes no claim to provide an answer as to the optimum size of a plant from the point of view of successful industrial relations, certain tentative conclusions did emerge from this "pioneer" study in plant-size relationships.

Small plants (with fewer than 500 workers) were found to have some major advantages over large plants in that their smallness fostered a "plant atmosphere" which permitted the management to know the workers intimately and to provide them with a variety of personal services. In such an atmosphere, employer-employee relations were more stable and successful than in large plants; strikes were less prevalent, and collective bargaining proceeded more directly and expeditiously because negotiations more frequently were handled by top officers rather than by delegation.

Among other characteristics of industrial relations on which plant size was observed to have some effect were susceptibility to organization and the level of wage rates and related benefits. In the highly unionized Trenton area, all the non-union plants were small, but they constituted only one-fifth of the small plants included in the study.² Although, as a group, the small plants had lower wage rates and fringe benefits, there were sufficient deviations and offsetting factors, such as planned overtime and a variety of informal services, to make the wage and fringe disadvantages of the small firms more apparent than real.

Small branch plants of large corporations were able to combine some of the advantages of both small and large plants, through preserving the "personal approach" while paying higher wages and drawing upon the specialized services and larger experience of the parent corporations.

Nature of the Study

This study, a byproduct of the university's major research in the Trenton area, turns its attention to a hitherto unexplored field of inquiry: What effect, if any, does a plant's size have on its industrial relations practices and the "success" of its program? The author cautions that since such a pioneer study lacks the advantage of a previous body of information, the results must be considered tentative, pending more extensive investigations. The chief sources of information were interviews with management and union officials, but major reliance was placed on information furnished by management. No workers were interviewed.

The Plant Atmosphere

The "personal approach" or "family atmosphere," which was deemed to be so conducive to good relations in the small plants, takes a variety of forms, but generally connotes an informal relationship between the firm's officers and workers, an "easy-going" attitude toward the work pace, consideration for a worker's personal problems, an effort to provide steady, year-round employment, promotion from within (though this is somewhat negated by scarcity of promotional opportunities), and, where the small plant was organized, sincere cooperation with the union. The success of such a policy depends on its genuineness, the report concludes, since insincerity "does not fool the workers and serves only to antagonize them."

¹ Sherrill Cleland, The Influence of Plant Size on Industrial Relations, Princeton University, Research Report Series No. 89, 1955, 65 pp. \$2.

This report embodies partial results of a 2-year study of 82 of the 558 manufacturing plants in the Trenton area. The sample accounted for 72 percent of the area's manufacturing employment. Major industries, in terms of the number of both plants and employees, were primary metals, fabricated metal products, rubber, pottery, and nonslectrical machinery. Of the 82 surveyed plants, 52 (or 63 percent) were small, i. e., employed fewer than 500 workers, and 12 employed 100 or fewer.

The first report in the series, Hiring Practices and Labor Competition, was summarized in the Monthly Labor Review for February 1955 (p. 192).

¹ Over 95 percent of the workers were employed in the 71 plants which were organized, 45 by the Congress of Industrial Organizations, 18 by the American Federation of Labor, and 8 by unaffiliated or independent unions. Major unions were the CIO's Steelworkers, Rubber Workers, and Auto Workers; the AFL's Brotherhood of Potters; and the independent United Electrical Workers.

The 11 nonunion plants employed a total of 2,288 workers, with individual employment ranging from 20 workers to over 400.

Wage and Personnel Policies

With respect to wages, the effect of size, although evident, was not definitive. Taking the hiring rate as the standard, only 33 percent of the small plants were found to pay above \$1.15 per hour, compared with 90 percent of the large plants. In a comparison of average straight-time hourly earnings of production workers, however, 6 of the 15 plants having highest earnings were small; on the other hand, 14 of the 15 having lowest earnings were also small. Some plants offset low straight-time earnings by scheduling overtime to increase take-home pay. Generally the work force in the low-paying plants was predominantly women.

Although there was no "general pattern of relationship between plant size and fringe benefits," unorganized plants (all small) had fringe benefit programs well above the average for all firms surveyed. According to an official of one such plant, ". . . it is necessary for us to follow the benefits granted by the union rather closely. To lag considerably behind gains won by this union would certainly be a factor in making continued nonunion operations at the plant difficult."

The most significant difference in personnel policies between large and small plants appeared to be the absence of formal training programs in the small plants, which their managements regarded as a weakness in their employee relations, but which the author assessed as an imagined rather than a real disadvantage. Turnover and absenteeism were generally lower in small plants, and management-worker communications were notably better.

Labor Relations and Collective Bargaining

Trade union roots in Trenton go back to the 1880's. The survey found a high degree of organization in 1953 with all of the 30 large plants unionized, as well as 41 of the 52 small plants. The report concludes that "small plant size is one

important factor among many which might help management avoid the need for a union or might tend to promote better industrial relations where a union exists." In the small organized plants, according to management, union leaders were usually long-service employees, less given to militancy than leaders in large plants, and better able, because of the greater intimacy of the small plant environment, to minimize and cope with factions within the local union.

In the actual bargaining process, the author's impression was that "honesty and sincerity of effort to accommodate seem to have developed to a high degree" in the small plants, and that they had "shorter and less difficult negotiations." A large part of this success can be attributed to the fact that generally a responsible company official was dealing directly with the union's representative. In the words of one such company executive:

One of the advantages of small size is that the union is easier to deal with because they know they are talking with top management. Also it is better for the management's side as well because the management team knows they do not have to satisfy an absentee from the bargaining table that their specific actions in the negotiations are wise ones. Therefore, both sides can be more straight-forward and can have a much better relationship.

Even in the Trenton area, which has a more favorable industrial relations record than many other highly unionized areas, small plants had fewer strikes than large ones. Half of the 82 plants studied reported no strikes during their present ownership and of these, three-fourths were small. Of the 41 that reported strikes, half were small and even within this group, the percentage having a strike record rose markedly with increased size. Thus, in the under-100-employee group, only 8 percent had such a record, while 30 percent of the 100-200 group and 53 percent of the 200-500 group had experienced strikes. The study draws the positive conclusion that small size is a significant factor in "maintaining a nostrike record."

Injury Rates in Manufacturing, Fourth Quarter 1954

THE ALL-MANUFACTURING injury-frequency rate ¹ continued its downward trend and reached an alltime low of 10.7 disabling injuries per million employee-hours worked during the fourth quarter of 1954, according to preliminary reports compiled by the Bureau of Labor Statistics. This rate was 9 percent below that for the preceding quarter and 11 percent below the average for the fourth quarter of 1953. The decrease between the third and fourth quarters of 1954, however, was slightly less than usual; for the preceding 11 years, decreases between the two quarters had averaged 10 percent.

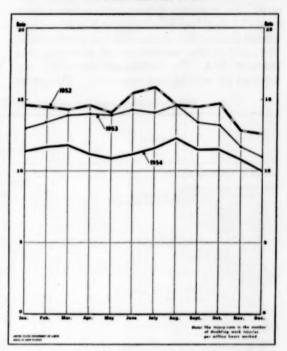
Monthly rates followed about the usual seasonal pattern, except that the decrease between October and November—6 percent—was somewhat smaller than in most preceding years. The October rate of 11.5 was unchanged from September, and the December rate of 10.0 was down 7 percent from November.

Injury rates throughout 1954 were well below those for the corresponding periods of 1953. (See chart.) The difference between the two years, however, was less in the fourth quarter than during earlier months, diminishing from 13 percent in October to 8 percent in November and 9 percent in December. In contrast, the rates for May and June were each 22 percent lower in 1954 than in 1953. However, despite the slackening of the rate of decrease in injury rates during the latter part of 1954, the low level of rates was being maintained.

On the basis of these preliminary figures, it is anticipated that the average injury-frequency rate for the year 1954 will be about 11.5. This would be 14 percent below the 1953 rate of 13.4, which was previously the lowest annual rate on record.

The decline in injury rates from the third to the fourth quarter 1954 was widely distributed among the various manufacturing industries. Of the 130 industry classifications for which comparable quarterly rates are available, 63 showed decreases of 1 full frequency-rate point or more; only 21 reported significant increases; and 46 remained virtually unchanged.

Injury-Frequency Rates in Manufacturing, Fourth Quarter 1954



Comparisons of the preliminary annual averages for 1954 with the final 1953 figures reveal an even better showing. Decreases of 1 full frequencyrate point or more were recorded for 77 industries, while significant increases were reported for only 12, and little change was shown for the remaining 43. (See table.) The most outstanding year-toyear improvement in safety was found in the boatbuilding and repairing industry, with a decrease from 36.3 disabling injuries per million man-hours in 1953 to 26.4 in 1954. The rate for the vegetable and animal oils and fats industry decreased from 25.4 to 19.3; for wooden containers, from 34.0 to 28.2; for paving and roofing materials, from 13.3 to 8.0; and for fabricated wire products, from 19.6 to 14.4.

¹ The injury-frequency rate is the average number of disabiling work injuries for each million employee-hours worked. A disabiling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job which is open and available to him throughout the hours corresponding to his regular shift on any one or more days after the day of injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational disease.

In spite of the substantial reductions in injury rates, many industries still have relatively high rates. For example, in the logging industry there were 73.2 disabling injuries for each million hours worked during 1954; in sawmills and planing mills, 42.2; and in the manufacture of structural clay products, 40.5. The bottled soft drinks industry reported the next highest rate—28.5. There were

5 other industries with rates between 25 and 30; 14, between 20 and 25; and 22, between 15 and 20.

On the other hand, injury-frequency rates of 4 or less were recorded for the synthetic fibers industry, synthetic rubber, explosives, rubber footwear, electrical equipment for vehicles, electric lamps (bulbs), radio tubes, miscellaneous communication equipment, and aircraft.

Injury-frequency rates for selected manufacturing industries, fourth quarter 1954*

		Fourth qu	arter 1954*		Fourth	Annual average	
Industry	October	November	December	Fourth quarter	quarter 1953	1954*	1958
Average, all manufacturing	11. 5	10.8	10.0	10.7	12.0	11.5	13.
Food and kindred products:		-					
Meat packing and custom slaughtering. Bausages and other prepared meat products.	20.0 15.2	19. 6 18. 8	17. 1 15. 8	10. 9 16. 6	18.1 24.5	18. 7 23. 4	20.
Dairy products Canning and preserving Grain-mili products	13.3 21.0	18.9	10. 9 17. 0	14.3	16. 9 21. 8	17. 1 21. 5	18.
Orain-mili producta	23.6	15. 9	25.0	21.6	18.1	20. 5	16.
	15.8	16. 2	13.7	15. 2	14.8	16.6	16.
Cane surar Confectionery and related products Bottled soft drinks	15.0 9.0	13. 2	23. 5 6. 2	17. 2	17.9 12.6	19.3	19.
Bottled soft drinks	(1)	(1)	(1) 0.2	25.0	27. 2	28.5	30.
Astate and mate inquire	17.8	16.7	14.5	16.3	18.2	17.9	21.
Distilled liquors. Miscellaneous food products.	(1)	(1)	(1)	4.1	5. 2	4.9	6.
Miscellaneous food products Textile-mili products:	11.8	11.8	13.0	12.2	14.9	13.7	15.
Cotton yarn and textiles	8.1	8.1	6.7	7.6	7.8	8.1	8.
Rayon, other synthetic, and slik textiles	8.3	8.2	6.7	7.6	6. 5	6.7	7.
Woolen and worsted textiles	15.9	17. 5	12.6	15.3	13. 2	14.3	16.
Knit goods Dyeing and finishing textiles	5. 1 11. 8	13.3	12.6	12.6	12.9	4.7	14.
Miscellaneous textile goods	12.6	15.9	15.3	14.6	16.9	16.9	17.
Miscellaneous textile goods Apparel and other finished textile products:							
Clothing men's and boys'	7.0	8. 5	5.4	6.0	6.7	7.2	8.0
Clothing, women's and children's Miscellaneous fabricated textile products Jumber and wood products (except furniture):	12.3	5, 2 9, 2	8.1	9.9	12.2	12.0	12.
Aumber and wood products (except furniture):	12.0	9.2	8.1	0.0	12.2	12.0	12.
Lotteine	74.8	58.3	74.7	69.2	70.1	73. 2	76.5
Sawmills and planing mills Millwork and structural wood products	46.4	44.2	41.1	44.6	40.0	42.2	44.3
Plywood milis	18.8	20. 0 21. 5	19.1	19.3	19.9 26.3	21. 2	25.1 29.1
Plywood mills Wooden containers	20.6	28.3	30, 5	27. 5	32.1	28.2	34.6
Wooden containers Miscellaneous wood products.	26.9	30.8	29.4	29.0	31.0	27.9	31. 7
Furniture and fixtures:							
Household furniture, nonmetal Metal household furniture	20.3	(1)	(1) 15.5	18.3	19. 5	17. 4 21. 7	20. 9
Mattremes and bedsprings	16.3	17.7	21.7	18.5	19. 7	20.3	17. 4
Office furniture Public-building and professional furniture	19.9	16. 5	12.2	16. 2	16.5	17.1	17. (
Public-building and professional furniture	(1)	(1)	(1)	18.0	18.7	21.0	20, 9
Partitions and fixtures	(1)	(1)	(1)	23.7	14.1	24.1	20. 2
Puln paper and paperhoard mills	11.0	11.1	11.0	11.0	12.9	11.6	13. 4
Paperboard containers and boxes	14.3	13. 8	13.0	13. 7	16, 2 14, 7	13.3	17. 0
Paperboard containers and boxes Miscellaneous paper and allied products Printing, publishing, and allied industries:	13.8	12.1	11.7	12.5	14.7	12.8	14.1
Newspapers and periodicals.	9.1	10.1	8.9	9.4	12.2	10.1	9.7
Miscellaneous printing and publishing	8.2	8.3	8.9 7.2	7.91	8.2	8.5	8.7
							-
Industrial inorganic chemicals Plastics, except synthetic rubber	4.5	5.1	8.0	6.4	6. 7 5. 1	6.5	7. 2 5. 6
Synthetic rubber		(1) 0.1	(1) 2.0	2.4	2.6	2.9	3.1
Synthetic fibers	(1)	(1) (1)	(1)	2.2	1.4	2.1	1.7
Explosives Miscellaneous industrial organic chemicals		(1)	(1)	2.7	2.0	2.3	3,4
Miscellaneous industrial organic chemicals. Drugs and medicines.	8.3	3,8	6.0	6.5	8.6	4. 5 7. 8	8.7
Soap and related products	10.4	7.0	10.4	9.6	7.2	7.7	8.1
Soap and related products. Paints, pigments, and related products.	12.8	12.4	8.3	11, 1	9.2	10.5	10. 9
	(1)	(1)	(1)	16. 7	14.3	16.3	18.2
Vegetable and animal oils and fats Compressed and liquefied gases	(1)	(1) 4	17.0	18.6	27. 4 11. 9	19.3	25. 4
Miscellaneous chemicals and allied products	13.5	10.8	9.6	11. 2	17.0	15.6	17. 8
lubber products:					-		
Tires and inner tubes	0.7	. 4.4	8.4	5.5	4.4	3.7	4.5
Rubber footwear Miscellaneous rubber products	12.4	10.9	(1)	3. 8	11. 2	11. 5	12.9
entrur and matcher products:	10.4	10.0	00	10. 0	44. 4	AA. 0	12.0
Leather tanning and finishing	22.0	16.0	21.9	20.0	21.9	24.6	26.0
Hoot and shee cut stock and findings	(1)	(1)	(1)	(1)	(1)	22.4	21. 2
Footwear (except rubber) Miscellaneous leather products	(1) W. 5	(1) 8.2	7.0	8.2	8.5	8.6	9. 8
ELECTRON DE LA CONTRACTOR DEL CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR DE LA CONTRACTOR		6.4	7.5		200.0	8812	

Injury-frequency rates for selected manufacturing industries, fourth quarter 1954*-Continued

		Fourth qu	inrter 1954*		Fourth	Annual	average
Industry	October	November	December	Fourth quarter	quarter 1953	1954*	1953
Stone, clay, and glass products:							
Glass and glass products	8.0	6.5	8.2 34.9 14.0	7. 6 39. 7 17. 8	9.8	8.6	38. 18.
Structural clay products Potters and related products	43. 1 19. 8	41. 0 19. 5	14.0	17.8	34. 8 17. 2	16.2	16.5
Concrete, gypsum, and mineral wool	(1)	(1)	(1)	22.1	20. 8	24.8	26.6
Miscellaneous nonmetallic mineral products	8.7	13.8	12.7	11.7	12.8	13. 1	26. 6 17. 7
structural clay products Pottery and related products Concrete, gypsum, and mineral wool Miscellaneous nonmetallic mineral products Primary metal industries: Hlast furnaces and steel mills Gray-iron and malleable foundries. Steel foundries		4.0		4.9		4.9	8.1
Gray-iron and malleable foundries	4. 2 25. 9	4. 2 25. 3	20.8	23.9	5, 2 25, 9	26.6	29.6
Steel foundries	14.4	16.4	14.0	14.9 12.5	17.8	17. 2	29, 6 21, 8
Nonferrous rolling, drawing, and alloying	14. 4 13. 9 17. 9	12.1	11.6	12.5	14.8	12.7	16.1
Steel foundries Nonferrous rolling, drawing, and alloying. Nonferrous foundries Iron and steel forgings	17.9	18.7	14.8	17.1	21. 2 19. 9	18. 5 19. 8	28. C 24. 3
Wire drawing	17. 8 13. 2	11.2	12.7	17.2	12.2	11.6	13.1
Wire drawing Welded and heavy-riveted pipe Cold-finished steel Fabricated metal products:	5.1	13.5	5. 5 7. 3	8.0 6.3	10.4	11. 6 6. 1	11. 2
Cold-finished steel	6.9	4.6	7.3	6.3	14. 2	10.6	14. 5
Fabricated metal products:		12.0	7.4	9.1	9.0		0.5
Tin cans and other tinware Cutiery and edge tools Hand tools, files, and saws	8.3	19.4	13.0	13.2	12.8	8. 5 13. 6	9.3 16.4
Hand tools, files, and saws	13.8	14. 5	13.9	14.0	18.0	14.7	19. 6
Hardware	8.3 9.3	9.4	8.6 10.6	8.8	10.4	9. 4 15. 5 17. 2	11.4
Oil burners and heating and cooking apparatus	12.9	13. 4 12. 1	10. 6	11.7	15. 4 19. 4	17.2	16. 7 21. 9
Structural steel and ornamental metal work	23. 5	18.0	20.2	20.6	20.6	21.6	23. 9
Hand toots, mies, and saws Hardware. Sanitary ware and plumbers' supplies. Oil burners and heating and cooking apparatus. Structural steel and ornamental metal work. Metal doors, ash, frame, and trim. Boiler-shop products.	23. 5 32. 9	18.0 17.9	20, 2 16, 9	22.7	16.0	21. 2	19. 9
Boiler-shop products	21.8	19.5	19.4	20.2	24. 5 19. 1	23. 0 19. 3	23. 6
Stamped and pressed metal products	22. 4 10. 8	13.0	17. 2 10. 6	17. 6 10. 3	13.1	10.7	22. I 14. 3
Sheet-metal work Stamped and pressed metal products Fabricated wire products Metal barrels, drums, kegs, and pails	14.0	13.1	14.8	14.0	16.8	14.4	19. 6
Metal barrels, drums, kegs, and pails	(1)	(3)	(0)	5.6	8. 3 11. 5	9.0	10.6
Metal barrels, drums, kegs, and palls. Steel springs Bolts, nuts, washers, and rivets. Screw-machine products. Fabricated metal products, not elsewhere classified. Machinery (except electrical): Engines and turbines Agricultural machinery and tractors. Construction and mining machinery. Metalworking machinery. Food-products, machinery. Textile machinery. Textile machinery.	6.7	(1) 8.7	10.6	13.0 8.7	10.7	12.0	18. 6 18. 2
Screw-machine products	11.9	16.0	8.8	12.2	12.0	10. 4 12. 8	16.3
Fabricated metal products, not elsewhere classified	13.7	9.1	10. 8	11.1	12.4	12.4	12.5
Machinery (except electrical):				7.8		8.5	
Agricultural machinery and tractors	8.4	7. 4 8. 3	6.2 9.6		8.5	10. 2	9. 2 12. 8
Construction and mining machinery	16.3	15.2	15.0	8. 8 15. 5	9, 6 15, 9	17.0	20, 5
Metalworking machinery	8.9 18.3	9.9	8.6	9.1	10.7	10.3	12.6 17.2
Food-products, machinery	18.3	18.3	8. 4 10. 1	13.0	19.3 9.4 15.3	13. 2 9. 8	17. 2
Miscellaneous special-industry machinery	8.9 16.2	8.3 13.4	13.9	9, 1	15.3	15.3	11. 4 17. 0
Pumps and compressors	11.7	12.7 11.5	15.6	13.4	12.9	14.6	15.7
root-products, machinery. Textile machinery Miscellaneous special-industry machinery. Pumps and compressors. Elevators, escalators, and conveyors. Mechanical power-transmission equipment (except ball and roller bearings)	11.1	11.5	9.3	10.6	13.7	14.4	16.5
Mechanical power-transmission equipment (except ball and roller	10.4	8.3	10.8	9.8	11.9	10. 6	12.7
Miscellaneous general industrial machinery	11.3	13.4	11.8	12.2	14.3	15.3	16.0
	6.4 15.0	7.0	5, 6	6.3	14.3	7.3	8. 5 15. 7
Valves and fittings	15.0	10.0	12.2	12.4	15.1	13. 2	15.7
Valves and fittings. Ball and roller bearings. Machine shops, general.	9.8 11.7	7. 4 12. 1	9. 5	8, 9 12, 9	10. 0 14. 8	14.3	11.9
Electrical machinery: Electrical machinery: Electrical appliances.		14.1					
Electrical industrial apparatus	7.1	8.0	5.9	7.0	6.8	6.6	7. 1 9. 5
Electrical appliances	6.8	10.0 12.7	8. 4 18. 5	8.3 11.1	9.3	10.5	14. 8
Electrical equipment for vehicles	7.0	3.5	3.1	3.8	2.7	4.0	4.1
Electric lamps (bulbs)	3.9	3.5 3.5	8.7	3.8	2.7 4.6	3.0	8.9
Electrical appliances Electrical appliances Insulated wire and cable. Electrical equipment for vehicles Electric lamps (bulbs) Radios and related products Radios tubes	5, 4 5, 3	4.3	5.8	5, 2 4, 2 3, 3	8. 5	5.2	4.1 3.9 6.2 4.2 3.0
Radio tubes Miscellaneous communication equipment	3.2	3.1	3.1 3.5	3.3	8.8	2.7	3.0
Batteries	18. 5	10.8	16.4	15.3	11.4	18.8	12.1
Electrical products not elsewhere classified	(1)	(1)	(1)	6.0	5.3	5.9	7.8
ransportation equipment: Motor vehicles, bodies, and trailers. Motor-vehicle parts and accessories.			3.9	4.0	4.6	4.2	
Motor-vehicle parts and accessories	4.4 5.2	4.6	4.9	4.0	4.4	8.4	6.9
	2.8	3.0	5.0	2.7 5.3	3.6	8.4	3.8
Aircraft parts	5.8	5.1	5.0	5. 3	5. 9	5. 4	6.3
Boot building and repairing	20.0	(1)	(1)	17. 1 25. 8	16.7	19. 0 26. 4	21. 1
Aircraft parts Ship building and repairing Boat building and repairing Boat suilding and repairing Raircad equipment Boat and related products:	8.7	5.0	7.9	7. 2	31. 4 10. 9	8.6	36, 3 11, 3
astruments and related products:							-
seruments and related products: Scientific instruments Mechanical measuring and controlling instruments Optical instruments and lones Medical instruments and supplies Photographic equipment and supplies Watches and clocks	5.8 7.2	2.1	6.1	4.4	3.9	8.0	A. 5
Outled instruments and leases	(1) 7.3	(1) 6.4	7.3	7. 0 8. 1	4.7	7. 6 7. 2 8. 1 4. 2 6. 8	7.1 6.6.
Medical instruments and supplies	8.4	4.8	3.9	5.7	6.8	8.1	7.1
Photographic equipment and supplies	6.5	5.9	8.3	7.8	8.7	4.2	5. 6
Watches and clocks	6.5	8.4	8.3	7.8	6.8	6.8	7.7
Paying and roofing materials	m	(1)	(1)	6.8	12.3	8.0	13.3
Jewelry, silverware, and plated ware	12.6	15.2	9.1	12.3	5.8	9.6	7.5
Protograpme equipment and supplies Watches and clocks (iscellaneous manufacturing industries: Paving and roofing materials Jewelry, silverware, and plated ware Fabricated plastics products Miscellaneous manufacturing	14.8	14.5	9.9	13.0	14.4	12.8	18.9
Miscellaneous manufacturing	12.0	11.0	10.9	11.3	14.2	12.1	15.0
Ordnance and accessories	6.8	7. 2	4.5	6.0	9.8	7.1	8.0

^{*}The monthly and quarterly injury-frequency rates presented in this table were derived from a sample of about 14,700 establishments, covering approximately one-third of the employees engaged in manufacturing. They were adjusted to be comparable with the final averages for 1683, which were based on a more comprehensive survey covering approximately 60 percent of all

employees engaged in manufacturing. Rates for 1954 are preliminary and are subject to revision when final annual averages become available. See Monthly Labor Review, December 1954 (pp. 1353-1354) for comparable quarterly rates for 1953 and the first 6 months of 1954.

Insufficient data to warrant presentation of average.

Railroad Retirement and **Unemployment Insurance in 1953–54**

BENEFITS PAID during 1953-54 under the Railroad Retirement and Railroad Unemployment Insurance Acts exceeded the total in any previous year. the Railroad Retirement Board stated in its most recent annual report.1 However, the number of beneficiaries was even lower than in 1949-50, when unemployment was unusually high.

The higher benefit payments were attributable primarily to a general decline in industrial production and, consequently, greater unemployment benefit activities; continued growth in the number of retirement and survivor beneficiaries; and repeal of a "dual benefits" restriction which had formerly required benefit reductions when an annuitant was also eligible for social security payments.

These factors, including particularly the drop in the taxable payroll 2 due to unemployment, caused retirement payments to rise 11 percent from the preceding year, while tax collections declined by 4 percent, and unemployment payments to exceed the total income of the account by about \$107 million.

Retirement and Survivor Benefits

During 1953-54, 645,000 persons-more than ever before-received monthly and lump-sum retirement and survivor benefits. On June 30, 1954, about 562,000 annuitants were on the rolls, including approximately 290,000 retired employees, 98,600 annuitants whose spouses drew auxilliary benefits, and 3,900 pensioners who had retired before July 1937, when the retirement act went into effect; also a large number of survivors of deceased annuitants, among them nearly 106,-000 aged widows and widowers and over 45,000 children. About 49,000 monthly benefits were terminated during the year.

The average monthly retirement benefit awarded during the fiscal year was \$103.85 (about \$1 less than a year before) and the auxiliary benefits awarded to the annuitants' spouses averaged \$35.39 per month. Average survivor benefits ranged from \$39.78 for children to \$60.04 for widowed mothers. On June 30, 1954, employee annuities averaged \$99.53 per month; pensions averaged \$80.20, and survivor benefits ranged from \$34.33 for children to \$53.23 for widowed mothers.

Financial Operations. The total income of the railroad retirement account during the fiscal year was \$736,664,000 (principally remittances from the United States Treasury representing retirement tax collections, and \$98,659,000 in interest earned on investments), and its expenditures \$529,973,000, of which more than \$512 million were paid in benefits. The taxes collected 3 during the year amounted to \$602,430,000, or 4 percent less than in the preceding year. While tax collections declined, the benefit payments under this program rose by 11 percent, thus raising the ratio of benefit payments to tax collections to 85 percent, as compared with 74 percent in 1952-53 and 50 percent in 1949-50.

The smaller retirement-tax collections were attributable to the decline in taxable payroll due to substantial unemployment during the year. The increase in total benefits paid was caused mainly by two factors: first, continuous growth both in the number of monthly benefits in current-payment status and of lump-sum awards.

The other significant development which affected the size of total retirement benefits paid in 1953-54 was the repeal, on June 16, 1954,4 of the dual-benefits provision of the Railroad Retirement Act, enacted in October 1951, under which an employee's railroad retirement benefit was reduced if he also qualified for OASI insurance benefits. Since the repeal was retroactive to October 30, 1951, an additional \$25 million in back payments was paid to about 34,000 annuitants, which accounted for about half of the increase over the preceding year in the total retirement benefits.

Based on the Railroad Retirement Board's annual report for the fiscal year ended June 30, 1954, Washington, 1955.

In 1953, the latest year for which data are available, the taxable payroll of the 1,405,000 railroad workers covered by both systems was \$4,990 million-1 percent less than in 1952.

^{*} Taxes for railroad retirement are collected by the Internal Revenue Service in equal shares from employers and employees, and deposited in the general fund of the United States Treasury, credited directly to the railroad retirement fund. From this amount, Congress specifies annually the maximum amount that may be used for administrative purposes and the remainder, beyond amounts required for immediate benefit payments, is invested in special 3-percent Treasury notes, the earnings from which constitute a substantial portion of the account's income

Public Law 398 (83d Cong., 2d sees.). See Monthly Labor Review, Oct. 1954 (p. 1104).

Unemployment and Sick Benefits

Unemployment. The considerable unemployment which had developed during the fiscal year was almost wholly responsible for a 44-percent increase from the preceding year in the total benefits paid to sick and unemployed railroad workers.⁵ For the third time in 15 years of the railroad unemployment insurance system, more than a quarter million railroad employees became beneficiaries, as railroad employment declined from 1,440,000 in July 1953 to 1,230,000 in April 1954.⁶

Hardest hit by unemployment were laborers, helpers, and apprentices, who experienced prolonged unemployment during the year more often than any other occupational group. In March 1954, when unemployment was heaviest, way and structure laborers constituted almost one-third of the beneficiaries. Also, since the reemployment opportunities in 1953-54 were scarcer than in the 3 preceding years, a much smaller proportion of beneficiaries stopped claiming benefits each month than in any of those years (December excluded). The average duration of unemployment was 100 days, longer even than in 1949-50; and the average amount of unemployment benefits per person for the benefit year was \$380 as compared with \$316 for the sick beneficiaries, because the unemployed workers stayed on the rolls longer.

Sick Benefits. Fewer railroad employees received sick benefits ⁷ in 1953-54 than in the preceding year. But the beneficiary rate (per 100 qualified

employees) remained at the record level of 8.1 established in 1952-53, and the average duration, average benefits, and the benefit exhaustion rate were higher than in any previous year. Consequently, the \$44.9 million paid in sick benefits was about \$1.4 million more than in 1952-53.

The factors principally responsible for these changes from the preceding year were: The absence, in contrast to other years, of any appreciable seasonal rise in respiratory ailments, and an increase in the number of persons with chronic ailments who continued on, or reentered, the rolls from the preceding benefit year.

New Legislation

Three measures adopted by the 83d Congress affected the railroad retirement and unemployment insurance systems; two of them were approved after the close of the fiscal year, covered by the report's operating data. These were:

Public Law 398, which has already been mentioned.

A second, Public Law 746,⁸ approved August 31, 1954, increased unemployment benefits for rail workers. It also effected some important changes in retirement benefits and eligibility conditions. For example, the act lowered the age requirement for adult survivor beneficiaries from 65 to 60 years; raised the maximum taxable earnings base from \$300 to \$350; increased from \$75 to \$100 the amount of earnings allowed to disability retirants under age 65; and permitted an annuitant's earnings after age 65 to be disregarded in computing his annuity, if a higher annuity results.

The third, Public Law 761, approved September 1, 1954, amending the Social Security Act, directly amended or affected the Railroad Retirement Act. In general, it guarantees that the railroad retirement benefits will not be less than they would be if paid under the Social Security Act. Beginning January 1, 1955, a beneficiary under age 72 may now earn (in other than railroad employment) as much as \$1,200 in a taxable year instead of \$75 per month as before, without loss of benefits.

³ Total (net) benefit payments under the Unemployment Insurance Act in 1953-54 was \$140,444,486, the highest for any of the last 4 years. Unemployment benefits alone amounted to \$95.5 million—77 percent more than in the preceding year.

Of the 419,000 persons who received benefits under this program in 1953-54, 265,000 were unemployed, 154,000 were sick or injured; 19,000 received both unemployment and sick benefits.

The unemployment situation was reflected in the financial accounts of the entire unemployment insurance program: The account's income in 1953—34 was \$53,55,000, its expenditures, almost entirely for benefit payments, were \$140,445,000; and its collections from the employers (who alone contribute to this fund) were \$14,685,000. Of total employer contributions of \$24,472,000, the remainder, representing 0.2 percent of taxable payrolls, was credited to the railroad unemployment insurance administration fund, as required by law.

⁷ Of the 154,000 sick beneficiaries, there were about 4,000 women on maternity leave.

^{*} See Monthly Labor Review, October 1954 (p. 1104).

[•] See Railroad Retirement Board report (pp. 13-14).

The Nation's Economic Prospects, 1955

WITH A CONTINUED ADVANCE in economic activity, the President said in his annual Economic Report, "it is reasonable to expect that the Nation's output within the coming year will approximate the goals of 'maximum employment, production, and purchasing power' envisaged by the Employment Act." ² To achieve this, however, the Congressional Joint Committee on the Economic Report estimated that gross national product would have to average \$375 billion in 1955, in terms of 1954 prices, and reach an annual rate of \$385 billion ³ at the end of the year. This would call for a continued advance in production during each quarter and a rise in national income to \$315 billion for the year.

These latter projections were believed by the committee to be consistent with outlook assumptions underlying the President's Economic Report. The committee's estimates assumed that international conditions will not change so as to alter markedly the Federal Government's anticipated demand for goods and services, including the size of the Armed Forces. Nevertheless, its advice to Congress on economic policy is inevitably overshadowed by "the stern reality of imperialistic communism and the hydrogen bomb." Military and technological developments to strengthen our defenses must, therefore, receive every possible economic support.

Assessment of Trends

The Nation's economy has been improving since late 1954, the committee stated, in spite of the post-Korean adjustment to the lower levels of defense spending. Employment and production have regained about one-half the 1953-54 loss, and unemployment has receded about one-third. The committee recognized numerous soft spots in the economy and emphasized the necessity for an openminded, flexible approach to Government policy pending confirmation of the recovery trend.

The inability to predict how far expansion would go, or how long it would proceed uninterrupted by new international trouble or a cyclical reversal of business, led the President to qualify his predictions. However, the President's Report stated that the business recovery now under way is powerfully supported by underlying forces of economic growth and predicted these developments: further expansion of consumer spending; some inventory rebuilding; continued rise in State and local expenditures; favorable trends in homebuilding and commercial construction; upward expenditures soon for plant and equipment; and export increases.

At the start of the year, national production was \$365 billion; the Federal Reserve index of production, 131. Civilian employment in February 1955 was 59.9 million. The committee found some evidence that output per man-hour in some individual segments of manufacturing, mining, and other industries may have gone up more rapidly than usual; however, for the economy as a whole during the past year, the gain in output per manhour seems to have been below the long-term average rate of increase. It is not enough, however, just to maintain present levels of production and employment, in the committee's opinion. Production must be expanded by every possible means. so as to keep pace with the expanded population and spectacular technological developments and to widen employment opportunities. Half the 14-member committee held that industry has not generated jobs in proportion to the improvement of conditions since 1953-54.

Unemployment estimates, as well as figures on employment, received various interpretations. Unemployment in February 1955 was estimated at about 2.8 million, using rough seasonal adjustments; the Census Bureau's seasonally adjusted unemployment index (1947-49=100) fell to 114 in January 1955 and 110 in February 1955, from a high of 142 in May 1954. But the approximate 23-percent reduction from May 1954 was not uniformly regarded as "commensurate with the recov-

¹ Based on the Report of the Joint Committee on the Economic Report, Senate Report No. 60 (84th Cong., 1st sess.), Washington, March 14, 1955, 163 pp. This document contains a unanimous report describing important areas of agreement; 4 separate "supplemental views" (the first and principal one signed by 7 Democratic Congressmen, with the other reports signed, respectively, by 4 Democratic Congressmen, 4 Republican Congressmen, and a single Republican Congressman); and some committee staff materials.

³ Economic Report of the President, transmitted to the Congress, January 20, 1965, 203 pp.

⁴ This figure is a projection of the potential output if "maximum" employment and production objectives are attained. It is not a forecast of the demand for gross national product which will actually develop.

⁴ Gross national product, seasonally adjusted, was at an annual rate of 8369 billion in the first quarter of 1955, according to data released by the Council of Economic Advisors.

ery in production." Unemployment, at about 1.4 million in the summer of 1953, reached a peak of 3.7 million in the spring of 1954. Up to February 1955, on a seasonally adjusted basis, unemployment had been reduced by only 800,000 from last spring's peak. Also, from 2 to 3 million persons are working part time involuntarily and between 200,000 and 400,000 are on temporary layoffs. The 1,769,000 claimants who in 1954 had exhausted their rights to unemployment insurance benefits were cited as further evidence of the severity of the recent recession.

Available unemployment estimates do not reveal the extent of underemployment accompanying part-time work and temporary layoffs, in the view of several committee members. They commented that the scope and quality of basic unemployment data could be improved by enlarging the coverage of the labor force survey and securing information on the characteristics of the unemployed. Moreover, new concepts and methods of analyzing the labor market might be developed.

The committee expected that total net farm income would continue to decline, though more slowly. Per capita farm income has not been rising to the same extent as per capita national income. The committee thought that the agricultural situation called for a more complete appraisal by the Government, for, as presented in supplemental views, an estimated 2 million or more farm families suffer from underemployment and inadequate incomes, not sharing proportionately in the improved standards of living.

Serious economic conditions persist in certain regions and industries: identified (in supplemental views) as 44 major employment areas and 100 smaller areas classified by the Bureau of Employment Security as having "substantial labor surplus" in January 1955—showing as unemployed 6 percent or more of the workers covered by unemployment insurance. The number of areas so classified had increased over the year.

Suggested Future Programs

The Federal Government could markedly contribute to ending low farm income, the full committee agreed, by expanding present vocational training and technical assistance programs and by making adequate credit available to small family farms. A policy of expanding consump-

tion and developing new products and product uses seemed much more promising than acreage contraction.

The committee unanimously declared there must be action now on behalf of the distressed areas and cited the need for more extensive recommendations in this regard. "Much can be done through public works." Also recommended were loans, technical assistance, research in new products and processes, and an expanded area-development program, as the President proposed, to aid the areas in adapting to changed economic conditions and to avoid what might be called a "prince and a pauper economy."

Public works—Federal, State, and local—should unquestionably be increased, with the Federal Government making important contributions, to be financed direct from the Treasury, according to the committee. Accelerated public works, with advance planning for "shelf" programs at times when private employment is falling off, would require early creation of the proposed Office of Coordinator of Public Works Planning. Progress must be more rapid on schools, highways, hospitals, and other community facilities, including, as the President had suggested, slum clearance and public housing.

The committee advocated no one course of action with respect to minimum wages. A 90-cent hourly minimum wage had been proposed in the President's Economic Report. Some members of the committee supported this figure; others suggested \$1 an hour "if economically feasible," or \$1.25 an hour. Study might be given to a program of small regularly scheduled increases, approximating productivity increases; higher minimums in selected areas and industries, possibly based on wage board determinations; and extension of minimum-wage coverage "if the facts warrant it."

In the field of social security, the committee suggested possible modification in the unemployment insurance programs to meet situations in distressed localities; for example, benefits might be paid for an added 13 weeks, conditional upon the worker's acceptance of retraining. The program also should be extended with Federal aid, and, as recommended by the President, benefits should amount to one-half of the worker's lost earnings and be paid for no fewer than 26 weeks, but the example and suggestions were offered in supplemental views.

To meet the Nation's security and other obligations, the committee supported the President's recommendation that the statutory Federal debt limit should be increased. It also agreed that national objectives could be furthered by extending Federal financial aid to small business until other sources of credit are available; expanding foreign trade; postponing reduction in corporate and excise taxes; ⁵ and improving the distribution of the tax burden (how soon this should be effected bringing disagreement).

⁵ Continued at existing rates to April 1956, by P. L. 18 (84th Cong., 1st sess.), approved March 30, 1955.

Trends in the Development of Apprentice-Training Programs

Editor's Note.—The following item is excerpted from the annual report of the Secretary of Labor for the fiscal year 1954. It is presented because of the current concern with problems related to skilled manpower.

As of the end of 1954, there were 54,000 registered apprenticeship programs throughout the country (as compared with 49,000 at the end of the preceding year). They covered nearly 155,000 business establishments.

Participating in these programs were 156,000 apprentices. It is estimated that there might be an additional 40 or 50 thousand not registered with Federal and State apprenticeship agencies. Out of this total of roughly 200,000 in formalized training, approximately 50,000 a year complete their training and enter the skilled trades.

The extent to which planned training has been developed varies from one industry to another. The following summaries represent in brief a few developments of major interest which occurred during the past year.

Petroleum. Management has been interested in the training policy of the Oil Workers International Union. Already, in several plants, programs have been worked out with management and labor establishing what may eventually develop into a pattern for the industry.

Construction. In the construction industry there are now 14 national trade standards. In 7 of these trades, the standards have been or are being revised. Local joint apprenticeship committees have increased in number.

A particularly significant document has been published by the National Joint Apprenticeship and Training Committee for the Electrical Industry, explaining the employment of coordinators at the national level. To provide the industry with an adequate supply of skilled workers, and to increase economic opportunity for the workers, the National Electrical Contractors' Association and the International Brotherhood of Electrical Workers have appointed a national director of apprenticeship to work under the policy direction of the joint committee.

Government. The Department of the Army has a special training program for its ordnance manufacturers. Three new plants have been added to this program.

Discussions have been held with a view to expanding the present Air Force apprenticeship system to include installations other than base shops. Seven programs of training other than apprenticeship were developed for aircraft maintenance mechanics interested in new processes of the industry.

A complete program of training for electronic technicians was developed at one signal corps station, and discussions were held on the possibility of a corps-wide program of apprenticeship and other training.

¹ The Secretary of Labor Reports . . . on the services of the U. S. Department of Labor to the people of the United States during fiscal year 1954. For sale by the Superintendent of Documents, Washington 25, D. C. 35 cents.

Technical Notes

Revised Standards for Work-Injury Statistics

On December 16, 1954, the American Standards Association (ASA) approved a revision of the American Standard Method of Compiling Industrial Injury Rates. The revision, which included a change in title to the American Standard Method of Recording and Measuring Work-Injury Experience, is recommended to be effective in respect to all work-injury data collected for periods subsequent to January 1, 1955. All injury-rate data compiled by the Bureau of Labor Statistics for 1955 will conform to the provisions of the revised Standard.

Although the changes in the format and arrangement of the Standard are impressive, the technical changes are not great. It is not anticipated, therefore, that the revisions will impair the comparability of current injury-rate data with data for previous periods.

The changes consist primarily of refinements in definitions and rules as to the reportability of particular types of injuries for the purpose of clarifying debatable items which were considered to have been inadequately stated in the preceding version of the Standard. The restatement of the reporting rules generally reflects the decisions of the ASA Committee on Interpretations on particular problem cases which have been submitted for rulings during the past 9 years. To assist the user, the revised Standard is supplemented by an appendix consisting of examples of the application of the various rules to typical problem cases. To further facilitate the uniform application of the Standard, the Interpretations Committee will continue to function.

Severity Rate

The only changes directly affecting the computation of injury rates apply to the calculation of injury-severity measures. The most significant

was the change in the base for the severity rate from a unit of 1,000 employee-hours worked to a unit of 1,000,000 employee-hours worked. The new base now corresponds to the 1,000,000 hour base unit traditionally used in the computation of injury-frequency rates. The net effect of this change in the base unit is an increase in the magnitude of the figures in which rates are expressed. Severity-rate figures hereafter will be 1,000 times as large, but their relationships to each other will not be affected. Full comparability with severity rates computed under the old formula can be obtained simply by multiplying the old rates by 1.000 or by dividing the new rates by 1,000. The new severity-rate definition is: "The disabling injury-severity rate is the total days charged per 1,000,000 employee-hours of exposure." The new formula for the computation of the severity rate is:

Severity rate= Total days charged×1,000,000 Employee-hours of exposure

Two reasons lie behind this change in the severity-rate base. Experience has indicated that the use of different base units in the computation of injury-frequency and injury-severity rates has resulted in some misunderstanding and misinterpretation. A single base for the two rates, therefore, appeared desirable. Because of the greater importance attached to the frequency rate and the general satisfaction with its method of computation, the severity-rate base was made to conform to that of the frequency rate. Second, by increasing the base of the severity rate, fractional rates were avoided. A high proportion of the computations based upon 1,000 hours produced rates of less than 1 (nearly 40 percent of the industry severity rates published for 1953 by the Bureau of Labor Statistics were fractional rates). The significance of these rates tended to be underemphasized because of their minute numerical values. and changes in the level of the rates tended to be

¹ Copies are available from the American Standards Association, Inc., New York, at 50 cents each.

either exaggerated or concealed due to the general practice of rounding to one or two decimal places.

The revision also establishes as a standard procedure the computation of an additional measure of injury severity. The "average days charged per disabling injury," obtained by dividing total days charged by total disabling injuries, is not new in statistical work, but it has not previously been recognized in the Standard. For analytical purposes, this measure evaluates injury severity in absolute terms of days lost or charged. The severity rate, on the other hand, by expressing days lost or charged in terms of a unit of employee-hours worked, indicates the prevailing rate of economic loss resulting from work injuries.

Minor changes in the listing of standard time charges for permanent-partial impairments will simplify the determination of the proper charges for partial impairments affecting fingers and toes. The revision provides specific ratings for each phalange damaged and eliminates the necessity of determining the percentage of impairment as required under the previous rules. Other rule changes (1) simplify the determination of time charges for multiple permanent impairments and (2) provide that repaired hernias shall be counted as temporary-total disabilities and charged with the actual days of disability. Unrepaired hernias are still to be counted as permanent-partial disabilities with a fixed time charge of 50 days whether time is actually lost or not. Partial loss of hearing is not to be included in the injury record, but the complete industrial loss of hearing in one or both ears is to be counted as a permanent impairment with a fixed time charge. It is not anticipated that these rule changes will have any significant effect upon the total days charged, or upon the level of the severity rate or average days charged per disabling injury.

Frequency Rate

The revision introduces no significant changes in respect to injury reporting or the computation of injury-frequency rates. Many of the rules relating to the reporting of specific kinds of injuries, however, have been rewritten in an effort to resolve questions and misunderstandings which arose in the past. In the main, these revised rules do not represent new reporting concepts. The most important of the clarifications relate to the

reporting of hernias, back injuries, injuries resulting from a preexisting physical deficiency, and injuries resulting from events not directly associated with employment.

The previous rule on hernias included a provision that such injuries should be counted in the injury-rate computations only when "the immediate pain was so acute that the injured person was forced to stop work until the pain subsided." The question which frequently arose was: For how long must he stop working to qualify the injury to be counted? The revision answers this question in the following language: "The immediate pain was so acute that the injured employee was forced to stop work long enough to draw the attention of his foreman or fellow employee, or the attention of a physician was secured within 12 hours."

The problem of distinguishing between workincurred back injuries and similar injuries which merely became acute during working hours is resolved by a new specific rule which provides:

A back injury or strain shall be considered a work injury only if it meets all of the following conditions:

(a) There is a clear record of an accident, or an incident such as a slip, trip or fall, sudden effort, or overexertion, or blow on the back.

(b) The physician authorized to treat the case is satisfied, after a complete review of the circumstances of the accident or incident, that the injury could have arisen out of said accident or incident.

A back condition which is revealed while an employee is performing his normal, regular duties, but which neither results from nor is caused by an accident or incident, shall not be considered a work injury.

Although the previous version of the Standard clearly indicated that the aggravation of a preexisting handicap or physical deficiency as a result of exposure to a hazard of the work environment should be counted in the injury record as a new injury, it was not entirely clear in respect to injuries attributable to such handicaps rather than to hazards of the workplace. The revision covers this point as follows:

If an accident or incident such as a slip, trip, or fall arises solely out of a preexisting physical deficiency, and if a worker without such physical deficiency would not have suffered such an accident or incident, any resulting injury shall not be considered a work injury. However, an injury which arises out of and in the course of employment shall be considered a work injury even though the employee had a preexisting physical deficiency.

To count or not to count injuries which occur in the course of employment, but which are attributable to so-called "acts of God" or to catastrophic events originating outside the employment, has been a recurring question which the previous version of the Standard failed to answer. The revision provides:

An injury which results directly from an external event of such proportions and character as to be beyond the control of the employer, such as tornadoes, twisters, hurricanes, earthquakes, flood, conflagration, or explosion originating outside of employment, or from an immediate secondary event, such as a fire, boiler explosion, falling electric wire, shall be classified as a work injury only if the victim was a policeman, fireman, member of a disaster or emergency squad, utility lineman, or other employee who is assigned duties in connection with such events.

An injury resulting from lightning shall be classified as a work injury if the conditions of employment are such as to anticipate exposure to such hazards as a matter of duty.

An injury which results from an activity necessitated by an external event, such as fighting a fire, cleaning up debris, repairing equipment, shall be classified as a work injury.

> -FRANK S. McElroy Branch of Industrial Hazards

Machine Methods in Employment Statistics

A SMALL, inexpensive electronic digital computer has capacity and speed suitable for a large scale, swiftly moving, repetitive statistical program, Bureau of Labor Statistics technicians have found after extended study. Processing of the employment statistics program, the Bureau's largest production effort by far, is now being transferred to this machine. The computer is already reviewing each employment report and rejecting those carrying doubtful data. In the near future, completed plans will have the machine automatically adjust employment figures for a tendency toward understatement, compute monthly statistics of employment, hours and earnings and, finally, adjust these data to new benchmark levels annually. Because of demand for continuous current information, the changeover is being made in carefully planned stages to avoid disruption of the series. Substantial savings in manpower have already accrued from this effort, however, and more are anticipated.

In its employment statistics program, the Bureau processes the largest monthly sample of establishment reports anywhere. The mass production of monthly figures for almost 2,000 published statistical series covering nearly 400 industries is based upon high-speed manipulation of almost a million pieces of data each month.

This information is provided on 110,000 reports from cooperating commercial and industrial firms throughout the country and covers about 155,000 establishments. The reports from the employers are channeled to Washington, D. C., through 48 cooperating State agencies operating according to a tight time table. The intensity of this coordinated activity is illustrated by the monthly production schedule: for example, the time span between completion of report forms by most respondents and first release of statistics to the public seldom exceeds 3 weeks.

Prior to the shift to the electronic computer, services provided by business machines, although extensive in volume, were limited in variety. Each month, figures furnished by employers were, figuratively, poured into a hopper, uncritically added report by report, and spewed out on machine sheets showing all reports and sample totals by industry. The sample totals were then converted to industry estimates by clerks using desk calculators.

Adaptations Needed

In planning for electronically prepared statistics conforming to the Bureau's technical standards some initial difficulties were encountered. For example, years of experience had indicated to Bureau technicians that current employment statistics tended, by small amounts, to understate actual total counts taken at a later date. This was caused by an accumulation of negli-

gible errors occurring each month, which were compensated by application of a bias adjustment factor. This process had to be adapted so that the computer could perform this function automatically. Also, means for automatically smoothing minor discontinuities in the hours and earnings series due to small month-to-month changes in sample composition had to be invented. Nevertheless, it was clear at an early stage that these requirements could be met by a small electronic computer.

There was another consideration, however, that mitigated against an immediate shift to production of complete statistics by the computer. Owing to the large and rapid inflow of data, an inevitable admixture of erroneous information was swept into the processing stream each month. Mainly, these fell into two categories: editing failures and keypunch verification failures. Under the existing scheme, incorrect data were sought after tabulation and removed by the trained clerical crew which prepared the final statistics. On the average, more than half of the industry statistics were modified each month in correcting for false data. It was obvious, then, to have proceeded with machine computation for its own sake would have resulted in no savings, and possibly a net loss, since most of the machine products would require recomputation because of the "input" errors.

The solution of this problem was, however, within the competence of the computer. Like the more widely advertised "giant brains" the Bureau's electronic digital computer has the faculty of memory, the ability to compare and to pursue appropriate alternate courses. It operates in a series of steps under predetermined instructions. During these steps the machine may read the punched card containing data for a report, perform arithmetic operations with these figures such as division, multiplication, addition, and subtraction and store the results for a later use, such as comparing computations.

With these possibilities in mind, Bureau technicians sought means to remove doubtful or erroneous information from "input" prior to data tabulation. Two related approaches to the problem were considered and ultimately both methods were adopted. Under both schemes, the current month's figures reported by each of the 110,000 sample cases are tested for plausibility by

the electronic computer and reports carrying doubtful data are not accepted. The first test is for internal consistency and the second for overthe-month trend. The reported figures used in testing are: total employees, and production workers (or equivalent) and their total pay and hours worked or paid for (all data are for 1 week).

Consistency Check

In testing the internal consistency of an incoming current report, the computer performs as follows: Average hourly earnings, weekly hours, and the ratio of production workers to all employees are calculated and the results are stored in "memory" cells. In the next series of steps, the computed data are compared with limits of reasonableness already determined for the machine. Subsequently another feature of the instrument is employed: The machine has the ability to choose between two succeeding series of steps, in the event of a given result. Thus, after the computed averages and ratio have been compared with limits for the industry, the computer proceeds to test the comparison. If the test shows doubtful data the machine generates an impulse that will be stored for punching into the card as a For example, in an industry rejection code. where average production worker earnings in excess of \$3 an hour are considered of doubtful validity, a report showing \$6 would be rejected. If the comparison indicated reasonable data, the machine proceeds to the next series of steps, skipping the generation and storage of the impulse.

Although initially one set of limits was applied throughout all industries, these were modified along broad industry groups as experience was gained. Reports which exceed the industry limits do not become input but are, instead, diverted for review. About 1.5 percent of all reports are removed in the consistency check each month, and nearly a third of these are found to be erroneous. Often these are systematic errors of one sort or another which occur during the processing of the report and which are easily corrected without recourse to the respondent. There are also editing failures, however, which allow a respondent error to enter the machine operations. These are returned to the cooperating State agency for correction by the employer. Afterward, all corrected data are restored to the main data stream so as to be included in a subsequent recalculation of statistics based upon a much larger sample.

Trend Check

Not all errors which would have a significant effect on the results are caught in the consistency check, however. This failure is attributable to the rather wide limits set to avoid removing an intolerably large part of the sample. The erroneous or doubtful reports remaining on the input side carry data which meet the consistency check yet are in sufficient error to force an adjustment of tabulated figures at the published industry level. The reason for this procedural failure is clear when the following is considered: In an industry where the upper and lower limits for the consistency check are \$3 and \$1, assume a report which usually shows hourly earnings of about \$1.25; through editing failure, the report shows \$2.50 in the current month. Both hourly earnings figures are within the screening limits but the 100 percent change from \$1.25 to \$2.50 is clearly suspect. Additional selectivity in the machine sequence is needed.

On these findings, Bureau staff developed a second test, in which the electronic computer rejects a report if the implication of the over-themonth change is unreasonable. The trend test is performed as follows: The machine is instructed to read and store the current and preceding month's employment, and the average weekly hours and average hourly earnings already computed for the consistency check for both months. In the next steps, the figures for the 2 months are compared. As in the consistency check, the machine chooses between two succeeding steps, upon a given result. Thus, after the figures for the previous month have been compared with data for the current month, the computer proceeds to test the comparison. If the test shows a doubtful change the report, in effect, is rejected.

Plans for the Computer's Use

Concurrent experience during 1954 with both types of tests proved that review of data by the Bureau's comparatively small computer met the requirements of the high speed, large volume, employment statistics program. Practically all of the processing errors of significance were being caught. Consequently, there is now assurance that automatic computation plans developed some time ago can be placed in operation this year with profit. Under these plans the machine system will continue to segregate reports showing doubtful data. These will be closely scrutinized, corrected where necessary, and restored to the data stream for further machine processing. The computer will automatically compensate the reported employment figures for the tendency toward understatement and the hours and earnings data for changing composition of sample content. Following this the computer will prepare publishable industry statistics of total employment, production worker employment, average weekly hours, average hourly earnings and average weekly earnings.1

Further, plans for annual adjustment to new benchmark levels through the use of the computer have been completed. In effect, this will be accomplished by feeding the benchmark data into the machine system. The system will consider both the benchmark and the previously computed monthly data, adjust the latter to the former, and provide the results in the form of tabular sheets suitable for use in photoprinting processes.

The savings already derived from intensive use of an inexpensive electronic computer have been quite substantial. More will be forthcoming as the machine takes on preparation of estimates and the annual adjustment to new benchmark levels. These are net savings. The Bureau's electronic computer replaced several pieces of mechanical equipment costing slightly more in combination.

-RUDOLPH C. MENDELSSOHN
Division of Manpower and Employment Statistics

¹ For a comprehensive description of the techniques for preparing employment estimates, see the Monthly Labor Review, September 1963 (p. 968); for hours and earnings estimates, see issue of April 1954 (p. 427).

Significant Decisions in Labor Cases'

Labor Relations

Discrimination Subsequent to a Strike. A United States court of appeals upheld ² a ruling of the National Labor Relations Board that the employer's discharge of strikers was unlawful as an infringement on the right to strike.

The employer had for several years executed contracts containing no-strike clauses with the same union. The employees began to be dissatisfied with their representation by this union. and several of them contacted a second union with a view to switching affiliation. The second union commenced to organize the plant about the time that contract negotiations were due to start. This campaign met with the combined resistance of both the employer and the original union, who were found by the NLRB to be guilty of violations of the Labor Management Relations Act. As a result of the unfair labor practices, many employees went on strike at the call of the second union without regard to the terms of the no-strike clause in the contract between the first union and the employer. Many of the strikers were discharged and some were refused reinstatement after the strike ended.

The court reviewed the terms of the contract and noted especially the language of the no-strike provision which stated that no strike should be allowed "during the term of this agreement." This language, the court said, could not stand alone but must be read in relation to the other terms of the contract; whereupon, the court held that the no-strike provision extended only to the terms of the agreement. However, since the contract did not purport to reach all conceivable phases of labor-management relations, this clause could not be interpreted as a surrender by employees of the right of self-help in defense against unfair labor practices. No contractual waiver of the right to strike in resistance to employer unfair labor prac-

tices can be inferred from general provisions in a contract which do not make clear that strikes caused by such practices were included in the prohibition.³

New NLRB Jurisdictional Standards for Territories. The Board ruled 4 that its new jurisdictional standards "will be uniformly applied in the territories as in the several States," and held that no exception from these rules for the territories was warranted.

The employer made all of his sales and purchases in Puerto Rico during the year preceding the hearing. Although the majority of the goods he purchased originated outside the Territory, the dollar volume was not sufficient to meet the new jurisdictional standards established by the Board for cases arising in the continental United States. As the employer's operations did not satisfy the inflow or outflow tests outlined in the Jonesboro case, the Board found that assertion of its jurisdiction would not effectuate the policies of the act.

One member of the Board dissented, claiming that this ruling ignored a contrary determination by Congress as set out in section 2 (6) of the act. He denounced the retreat from the prior plenary jurisdiction policy in regard to territories as a flouting of plainly expressed congressional intent.

Denunciation of Employer as Cause for Discharge. A United States court of appeals denied 6 enforcement of a Board order directing reinstatement of an employee who, during a union organization campaign, had written and caused to be circulated throughout the plant a letter in which she referred to the employer's vice president as a "liar." She further charged this official with having "an obvious contempt for the truth." When called to account by the employer, she affirmed that she had written the letter and stated: "I called

Prepared in the U.S. Department of Labor, Office of the Solicitor.

The cases covered in this article represent a selection of the significant decisions believed to be of special interest. No attempt has been made to reflect all recent judicial and administrative developments in the field of labor law or to indicate the effect of particular decisions in jurisdictions in which contrary results may be reached, based upon local statutory provisions, the existence of local precedents, or a different approach by the courts to the issue presented.

¹ NLRB v. Wagner Iron Works (C. A. 7, Mar. 7, 1955).

NLRB v. Mastro Plastics Corp., 214 F. 2d 462.

⁴ Cantera Providencia (111 NLRB 141, Mar. 4, 1955).

Jonesboro Grain Drying Cooperative, 110 NLRB 67. See also Monthly Labor Review, January 1955 (pp. 58 and 92).

^{*} NLRB v. Blue Bell, Inc. (C. A. 5, Mar. 2, 1988).

him a liar because he is a liar." She was discharged thereupon for insubordination. The Board held that her letter was provoked by a letter of the employer's vice president and that her letter was within the bounds of lawful conduct.

In overruling the Board's decision, the court said that the Board must not rely on scant evidence and on repeated inferences to make a finding which substitutes its own ideas of business management for those of the employer.

An employee engaging in concerted activity does not acquire a general or unqualified right to use disrespectful language toward or concerning the employer, the court held. An employee may be lawfully discharged if her conduct exceeds the bounds of legitimate campaign propaganda or is so disrespectful of the employer as to impair seriously the maintenance of discipline and thus render the employee unfit for continued service.

The court rejected completely the Board's contention that this employee might have remained true and loyal, even though she had publicly denounced her employer's vice president as a liar.

Employer's Election Day Speeches, Speeches to small groups of employees at various retail chain stores during working hours on the day of a Board-conducted election violated the rule in the Peerless Plywood 7 case prohibiting speeches on company time to massed assemblies of employees for 24 hours before an election, the Board held.8 The employer's district supervisor had spoken to groups of from 3 to 10 employees at 8 scattered retail outlets in his district. He gave the same general talk at all of these stores, urging the employees to vote against one of three unions involved in the election. The total number of employees addressed was only 60 or 80 out of 6,373 at 396 stores involved in the election, and there was no indication that these speeches or the votes of these employees had influenced the election results in any way.

The Board held that the principle underlying the *Peerless Plywood* rule is to insure that an election may be held in an atmosphere as conducive as possible to free expression by the employees. Violation of that rule, the Board decided, constitutes ground for setting aside an election, entirely apart from other specific interferences with an election. The actual effect on the voters, even if it could be measured, was not considered by the Board to be any more material than the effect on the result of the election. The Board concluded that the *Peerless Plywood* rule was unequivocal in stating that "violation of this rule will cause the election to be set aside" and rejected the employer's contention that his conduct should be viewed in the light of its reasonableness under the circumstances.

Employer's Duty to Disclose Wage Data. An employer was under no duty to disclose wage information in a particular situation which involved the processing of grievances rather than collective bargaining negotiations, the Board held.

The employer for several years had applied a merit increase system to salaries of his clerical employees. During contract negotiations in 1952, the union had demanded comprehensive information on the system and the substitution of automatic raises for merit increases. The employer refused, and the union retracted the demand. A contract was signed, retaining the merit increase system. Subsequently, differences arose between the employer and the union in adjusting grievances arising out of the employer's application of this merit system to various employees. The union again demanded disclosure of full information on the system. The employer offered data only on individual cases. The union, unsatisfied, filed charges that the employer's conduct constituted refusal to bargain.

In rejecting the union's contention, the Board ruled that this situation did not involve the broad obligation of a company to furnish wage data during collective bargaining negotiations. The issue here was confined, according to the Board, to whether the employer violated his duty to supply sufficient information to enable intelligent processing of grievances under the merit system.

The union, having agreed at the bargaining table to accept the system used by the employer in determining wage increases, was entitled only to information needed to process individual grievances, the Board held. The additional data demanded by the union had no significance in rating an employee under the system agreed upon by both parties, the Board concluded, and dismissed the charges of refusal to bargain.

⁷ In re Perriess Physical Co., 107 NLRB 106. See also Monthly Labor Review, February 1954 (p. 185).

^{*} The Great Atlantic & Pacific Tea Co. (111 NLRB 106, Peb. 15, 1955).

⁴ Arco Mfg. Curp. (111 NLRB 118, Feb. 18, 1955).

Secondary Boycott on Construction Site. A United States court of appeals held ¹⁰ that picketing of a construction site to drive off the employees of union subcontractors and thereby ultimately to organize the workers of two nonunion general contractors on the job was an unfair labor practice within the meaning of section 8 (b) (4) (A) of the act.

As part of its campaign to organize the employees of 2 construction firms, the union threw a picket line around a construction site where the 2 firms were general contractors. Many union members were working for various subcontractors on the site. The signs carried by the pickets did not indicate who was being picketed, only that the job was being picketed for purposes of organization. As a result, the union employees of the subcontractors refused to cross the picket lines. One of these subcontractors filed an unfair labor practice charge against the union. The trial examiner found that the union had violated section 8 (b) (4) (A), but his decision was overruled by the Board.

The court agreed with the findings of the trial examiner that the object of the union was to prevent the subcontractors from doing business with the general contractors during the course of the dispute, by keeping their employees off the job. This objective was illegal and clearly an unfair labor practice within the meaning of section 8 (b) (4) (A). The court cited the difficulty in distinguishing between legal and illegal picketing where two or more contractors are operating at the same work site and noted the rules laid down by the Board in the Moore Dry Dock case.12 There was a clear violation here, said the court, of the rule which provides that the picketing must disclose clearly that the dispute is with the primary employer. The order of the Board was set aside, and the case was remanded to the Board.

Preelection Interviews by Employer. The Board held ¹⁹ that the employer had interfered with the free choice of his employees by the technique of interviewing them individually and urging them to reject the union. In the period before an election, 2 officials of the employer conducted a series of personal interviews with the 14 employees in the bargaining unit. During these interviews, the officials discussed with the employees various

aspects of working conditions in the plant. They also explained the merit rating system used by the employer and pointed out to these employees that each was doing better under this system than unionized employees in other departments of the plant. The officials emphasized that, if the union came in, the merit rating system would be "limited"; they also expressed disapproval of the union as bargaining representative for such a small group of employees. The union lost the election.

The Board, in these circumstances, found unnecessary the determination of whether or not, during the course of these interviews, the officials threatened to discontinue merit increases if the union won the election. No doubt was left in the minds of the employees that the employer disapproved of the union and wished it to be rejected in the election. In these circumstances, the Board held, the technique of calling the employees into the employer's office individually to urge rejection of the union was, in itself, conduct calculated to interfere with free choice, regardless of the non-coercive nature of the employer's actual remarks.

State Labor Board Jurisdiction. The New York State Labor Relations Board assumed jurisdiction ¹⁴ over an employer engaged in interstate commerce whose volume of business was not sufficient to meet the new jurisdictional standards of the National Labor Relations Board.

The employer was a dealer in new and used automobiles and parts. There was no evidence that he was a franchised dealer, but his volume of business of all types was well below the applicable standards recently announced by the NLRB.¹⁵ The employer contended that, regardless of the fact that the NLRB would not assert jurisdiction, the Federal law had priority.

However, because the NLRB would not exercise jurisdiction, the State Board held that it was the only forum available to which this dispute could be brought. It cited a United States Supreme Court decision ¹⁵ expressly leaving open

¹⁸ Piezonki (Storer Steel Service) v. NLRB (C. A. 6, Feb. 26, 1985).

¹¹ Storer Steel Service, 108 NLRB 221.

¹⁹ In the Matter of Sailors' Union of the Pacific, AFL, and Moore Dry Dack Co., 99 NLRB 547.

¹⁰ Geo. J. Meyer Mfg. Co. (111 NLRB 154, Mar. 15, 1955).

¹⁴ Ruisch Motors (18 New York State Labor Relations Board 26, Mar. 10, 1955).

^{**} Wilson-Oldsmobile, 110 NLRB 74. See also Monthly Labor Review, January 1985 (pp. 88 and 98).

¹⁴ Bethlehem Steel Co. v. New York State Labor Relations Board, 330 U. S. 767.

the question of whether a State Board may act when the NLRB declines to assert jurisdiction. The State Board concluded that such disputes, if not regulated by the States, will not be regulated at all. Labor disputes may or may not substantially affect interstate commerce, but they invariably have an immediate and direct impact upon the local community in which they occur.

Veterans' Reemployment

Escalator Principle Reaffirmed. The Supreme Court in a one-paragraph opinion reversed a United States court of appeals and strongly reaffirmed the escalator principle as controlling the reemployment of veterans. One justice dissented, agreeing with the lower court's decision.¹⁷

A number of carmen helpers, among whom was Paul W. Diehl, Jr., had been temporarily upgraded in 1943 to work as temporary carmen (mechanics) under an agreement which was entirely silent concerning their possible seniority as carmen and left them with helper seniority. Diehl left this temporary carman's position later in 1943 for military service. In 1944, the disposition of seniority of temporary carmen was postponed by the employer and union until the expiration of the war emergency.

On November 11, 1945, Mr. Diehl, the veteran, was reinstated as temporary carman. On March 1, 1949, a new agreement provided that anyone working on that date as carman helper might, within 15 days after formal notice from the employer that he had completed 1,160 days of such work, elect to surrender his helper seniority for a place on the carman's seniority list, with date of March 1, 1949. Ranking on the carman's list of that date was to be in order of completion of the 1,160 days experience.

Diehl actually completed his 1,160 days experience on January 10, 1949. Having elected carman's seniority, he was ranked on the March 1, 1949, carman's list in a position corresponding to the order in which he and others with that seniority date had completed the required work. But for his military service, he would have completed the necessary work on June 1, 1946, and he claimed his ranking on that basis. Otherwise, helpers who were originally junior to him would be ranked above him on the March 1, 1949, carman's seniority list.

Diehl's argument was that when he had accomplished the work requirement after the break of military service and had made his election, he had a statutory right, based on the escalator principle, to the carman seniority and ranking he would have achieved if he had never entered military service. It was not shown that any seniority adjustment was allowed those who completed the work late because of intervening absences on furlough or leave.

The court of appeals had ruled against the veteran on three lines of argument. (1) It found an irreconcilable conflict between the statutory provisions for restoration without loss of seniority ¹⁸ (escalator principle ¹⁹) and those stating that the restored veteran must be considered as having been on furlough or leave of absence, ²⁰ and refused to apply the escalator principle.

(2) It concluded that the Oakley case 21 did not decide as to a veteran's right to opportunities for transfer lost during his military service or his right to retroactive seniority on making the delayed transfer after his return.

(3) It also held that the contract settling seniority for temporary carmen was nondiscriminatory, since it treated Diehl the same as all others in his "class" of temporary carmen. In doing so, the court rejected the contention that the effect of the provision was prejudicial to Diehl solely because of his military absence.

The argument before the Supreme Court also urged that the employer had fulfilled his duty of restoring the veteran without loss of seniority by returning him to the position he had left, with seniority credit in that position for the time of his military absence.²²

This argument and the position taken by the court of appeals on the other three points were before the Supreme Court when it reversed the judgment, basing its opinion in the Oakley case.

R. Co., 338 U. S. 278.

³⁷ Dichl v. Lehigh Valley R. R. (211 F. 2d 98, C. A. 3, 1954); (reversed by U. S. Sup, Ct., Mar. 14, 1955). See also Mouthly Labor Review, May 1954 (p. 561).

Belective Training and Service Act of 1949, 50 U. S. C. App. 368 (e);
 Universal Military Training and Service Act, 50 U. S. C. App. 459 (e) (1);
 see also section 9 (e) (2), idem.
 Flahyold v. Suillean Curp., 328 U. S. 275; Onkley v. Louisrille & Nashville

Selective Training and Service Act of 1940, 80 U. S. C. App. 308 (c); Universal Military Training and Service Act, 50 U. S. C. App. 459 (c) (1). Il See footnote 19.

^{**} See Addison v. Tennessee Cool, Iron & R. R. Co. (204 F. 2d 340, C. A. 5, 1953); Bostian v. Seaboard Air Line R. R. Co., (221 F. 867, C. A. 4, 1954).

Chronology of Recent Labor Events

March 1, 1955

The Secretary of Labor announced the formation of a Labor Advisory Committee to assist the Department of Labor in developing its policies and programs and in improving its operations. It is composed of 3 officers each from the AFL and the CIO, and 1 each from the United Mine Workers, the Railway Labor Executives' Association, and the Brotherhood of Locomotive Engineers.

March 4

The National Labor Relations Board ruled that its jurisdictional standards will be uniformly applied in all United States territories, as in the 48 States, business operations in the territories having no greater impact on commerce than similar enterprises in the States. A dissenting opinion protested that the Taft-Hartley Act specifically conferred jurisdiction over all commerce within each territory, as well as across territorial lines. The case was Conrado Forestier, d. b. a. Cantera Providencia, Mayaguez, P. R., . . . and Confederacion General de Trabajadores de Puerto Rico, Autentica.

THE Oil Workers International Union and the Gas, Coke and Chemical Workers, both CIO affiliates, merged to form a new Oil, Chemical and Atomic Workers' International Union, with approximately 200,000 members.

March 8

THE Senate confirmed Theophil C. Kammhols of Illinois, as general counsel for the NLRB, a post vacant since December 20, 1954. (See last Chron. item for Dec. 16, 1954, MLR, Feb. 1955.)

March 9

THE Canadian Trades and Labor Congress and the Canadian Congress of Labor, composed of international unions affiliated respectively with the AFL and the CIO, agreed on the principles of a merger into a single federation which would have more than one million members.

March 12

The AFL Machinists, representing about 20,000 mechanics and ground service workers, reached agreement, through mediation, with 5 major airlines—Capital, National, Northwest, Trans World, and United—providing general wage increases of 5 to 7 cents an hour, retroactive to July 1, 1954, and other increases standardizing mechanics' rates (see Chron. item for Aug. 13, 1954, MLR, Oct. 1954 and also p. 577 of this issue).

March 16

FOLLOWING agreement between the last 3 of the 12 AFL unions involved in a 16-month dispute with 5 Pittsburgh department stores to withdraw their pickets, the AFL Teamsters called its members back to work under terms of an agreement reached earlier, but which provided that they would not resume work until settlements had been reached with all of the unions involved (see Chron. item for Nov. 26, 1954, MLR, Jan. 1955).

March 20

PROFESSOR HARRY SHULMAN, dean of the Yale University Law School and labor umpire for Ford Motor Co. and United Auto Workers-CIO since 1943, died in Hamden, Conn.

March 21

Delegates representing AFL unions walked out of a meeting of the Conference of Maritime Unions, established in January 1954, in a dispute arising over criticism by three CIO member unions of a contract between the Sailors' Union of the Pacific (AFL) and the International Shipping Co. Harry Lundeberg, SUP secretary-treasurer, termed the contract an experimental agreement "designed to give competition in a trade now served almost exclusively by foreign-flag operators using former American flag vessels and scab crews"; he branded as "vicious and untrue" charges that it would increase the workweek from 40 to 56 hours and in many respects eliminate overtime pay.

The NLRB announced that in the future it will base its assertion of jurisdiction over a general construction contractor either on his total volume of business or on his volume and that of his subcontractors combined. In the case, Carpenters Local Union No. 1028, United Brotherhood of Carpenters and Joiners of America, AFL and N. W. Black, Ardmore, Okla., a contractor and his subcontractors had purchased materials and equipment worth more than \$500,000 from outside the State, thus together meeting the Board's "direct inflow" standard for certain multi-State enterprises (see Chron. item for July 15, 1954, MLR, Sept. 1954).

March 22

Daniel W. Tracy, president emeritus of the AFL International Brotherhood of Electrical Workers and member of the AFL executive council, died in Washington, having served as president of the Electrical Workers for 14 years and as Assistant Secretary of Labor during World War II.

Two AFL unions, the Machinists and the Ironworkers, signed a jurisdictional agreement which defines their respective work rights, establishes a procedure, including arbitration, for settling disputes, and provides for mutual organizing assistance.

March 25

The Presidential emergency board appointed to study the demands of the Order of Railway Conductors and Brakemen (Ind.) for a graduated pay scale reflecting increased locomotive weight (see Chron. item for Nov. 22, 1954, MLR, Jan. 1955) advised correction of pay inequities among about 9,000 "through freight" conductors and appointment of a full-time commission to review and recommend changes in the railroad wage structure for all operating employees, terming the present structure "obsolete." (See also p. 577 of this issue.)

March 27

The United Automobile Workers (CIO) opened its 15th convention, at which it endorsed the guaranteed annual wage as its current major collective bargaining goal and approved the creation of a \$25 million strike fund, through a \$5 monthly increase in dues, to strengthen its bargaining position. (For discussion, see p. 528 of this issue.)

March 28

THE Supreme Court of the United States, reversing a Missouri Supreme Court decision, unanimously held that a State may not invoke a State anti-trust law to enjoin picketing reasonably coming under the protection of the Taft-Hartley Act. The case, which involved two AFL affiliates, the Machinists and the Carpenters, was Weber et al. v. Anheuser-Busch, Inc.

The Supreme Court of the United States held (6 to 2) that the Taft-Hartley Act does not give Federal courts jurisdiction over a union's suit for wages allegedly owed its members under a collective bargaining contract. In Association of Westinghouse Salaried Employees v. Westinghouse Electric Corp., a union sought to collect pay deducted from salaries of 4,000 employees absent for a day when respecting picket lines of another union.

The Federal district court for Massachusetts ruled, in Local 205, United Blectrical . . . Workers . . . (Ind.) v. General Electric Co., that it lacked jurisdiction, under section 301 (a) of the Taft-Hartley Act, to issue an injunction enforcing the arbitration provision of a collective bargaining agreement because the action involved a labor dispute and the Norris-LaGuardia Act forbade issuance of an injunction.

March 31

THE Federal district court for the Southern District of New York denied an injunction brought by the International Longshoremen's Association (Ind.) to set aside hiring rules of the Bi-State Waterfront Commission, taking effect that day, as contrary to the union's contract (see Chron. item for Jan. 5, 1955, MLR, March 1955).

THE AFL Teamsters signed a memorandum with Montgomery Ward & Co., Inc., calling for future execution of contracts raising wages of workers at 9 company warehouses who had not had their rates raised by action several months previously and, as one result of the 18-month negotiations, bringing to 15,000 (from 3,000) the number of workers covered by union contracts.

Developments in Industrial Relations

A NUMBER of developments during March represented the culmination of longstanding negotiations or disputes. An agreement ended a long dispute between 5 major airlines and the AFL Machinists, while the 16-month strike of employees of 5 Pittsburgh department stores was also terminated. Work stoppages, preceded by prolonged negotiations, affected two large public service industries in the South—telephones and railroads. These involved the Communications Workers of America (CIO) and the Southern Bell Telephone and Telegraph Co., and 10 unions of nonoperating railroad employees with the Louisville and Nashville Railroad and 2 of its subsidiaries.

Elsewhere, additional contracts were concluded by aircraft firms similar to those negotiated recently in other parts of the industry. The petroleum industry announced its first major wage changes since 1953. Bargaining demands for this year's negotiations in the auto industry were the center of attention at the CIO United Auto Workers' annual convention.³ A pay increase designed to make military career service more attractive was enacted for the United States Armed Forces. As steps toward union mergers continued, leaders of both AFL and CIO warned member unions against attempts of Communist-dominated organizations to infiltrate their ranks.

Strikes, Negotiations, and Settlements

Communications. The Communications Workers of America (CIO) and the Southern Bell Telephone and Telegraph Co. were involved in a strike that began on March 14, after prolonged negotiations on a new contract became deadlocked. The company's proposal for inclusion of a no-strike clause and the union's demands for wage increases applicable to all groups covered by its contract appeared to be the major points of disagreement. The union claimed that the company's wage increase

offer would exclude about 5,000 of the approximately 50,000 workers covered. Reports of damage to telephone cables during the first week of the strike led to a union appeal that its members join in an effort to prevent vandalism.

Elsewhere in the industry, wage increases ranging from 2½ to 10 cents an hour, retroactive to February 27, 1955, were agreed upon by the Southern New England Telephone Co. and the Connecticut Union of Telephone Workers for 8,200 workers in a new agreement replacing one that expired March 1, 1955.

Transportation. Nonoperating employees of the Louisville and Nashville Railroad and several partially owned subsidiary railroads in 13 States stopped work on March 14 and established picket lines, thereby idling an estimated 25,000 rail workers. Demands of the 10 AFL unions involved in the dispute included health and welfare benefits, premium pay for Sunday work, improved vacations, and other benefits. The most publicized issue was the unions' demand for a health and welfare plan. The railroads have offered a voluntary plan under which the employer would pay \$3.40 a month and the employee \$1.85. They have stated that the unions were seeking a compulsory health and welfare program similar to that established by most of the Class I railroads in August 1954 on the basis of a Presidential emergency board's recommendations (under which plan the employee contributes \$3.40 a month and the carrier \$3.40).8 The carriers objected to the plan's compulsory aspect and contended that the insurance they proposed was voluntary and cheaper for the employees. When the strike was called, the unions said their demands were the same as the original proposals presented to the carriers in May 1953, including a health and welfare program to be supported entirely by the employer.4 During the last week of March, the nonoperating unions announced they would ask all the Nation's railroads to pay the entire cost of the health and welfare plans established under the agreement of August 21, 1954, with the Eastern, Western, and Southeastern Conference Committees.

¹ Prepared in the Bureau's Division of Wages and Industrial Relations.

See page 528 of this issue.

^{*} See Monthly Labor Review, October 1954 (p. 1139).

[•] See Monthly Labor Review, July 1963 (p. 765).

In another longstanding railroad dispute, a Presidential emergency board named last November 5 to investigate a controversy between the Order of Railroad Conductors and Brakemen (Ind.) and most of the Nation's Class I railroads, recommended establishment of a Wage Structure Commission "to review and to modernize the wage rate structure as a whole of the operating classifications in the railroad industry." The board held that this comprehensive review was "essential to the correction of wage inequities, to mutually constructive industrial relations and to the efficient operation of the railroads." It recommended setting up a commission composed of senior negotiators from the three regional organizations of the carriers and all major organizations of operating employees as well as several neutral members. The board found that an inequity existed in the average daily rates of pay of conductors in throughfreight service, but it rejected the formula proposed by the union to establish for all classes of conductor and brakeman service a revised method of wage payment based on weight of locomotives, similar to that used in determining the pay of engineers and firemen. Instead, the board recommended that the conductors and the railroads negotiate to correct the inequity either by increasing their basic daily rate or by some other suitable method.

Five major airlines-Capital, National, Northwest, Trans World, and United-and the AFL Machinists representing about 15,000 ground service workers settled their contract dispute on March 12.5 The revised agreements, which remain in effect until October 1, 1956, provided for general increases ranging from 5 to 7 cents an hour retroactive to July 1, 1954, increased minimums, and additional increases in 1955 to standardize mechanics' rates on all five lines. The settlement also shortened the time required to reach maximum rates for a given job, and made wage progression automatic over a 2-year period for airline mechanics employed by 3 lines, where progression had been contingent on trade tests. A Presidential emergency board, appointed last December, recessed its formal hearings in the case in order to mediate the dispute. During the last

part of March the emergency board reopened formal hearings in the mechanics' dispute involving Eastern Airlines, which did not participate in the settlement.

American Airlines and officials of the Transport Workers (CIO) reached agreement on a new contract March 4. The settlement, covering approximately 6,000 maintenance and ground service employees, provided for increases of 5 to 9 cents an hour, revised work rules, and a shortened (37½-hour) week for the midnight shift.

Retail Trade. The 16-month strike of employees of 5 Pittsburgh, Pa., department stores ended March 16, after 3 AFL unions representing office workers, retail clerks; and restaurant workers agreed to remove their picket lines and continue negotiations with the employers. Originally, the strike had involved 12 AFL locals.

Petroleum. General wage increases of about 10 cents an hour were proposed in varying forms by most major companies in the petroleum industry during the first half of March: A uniform 10 cents an hour; a 4-percent increase, with a minimum of 10 cents; or a combination of uniform cents-perhour and percentage increases. The offers were accepted by independent unions representing employees of a number of major companies, including Standard Oil (Indiana) and the Atlantic Refining Co. Acceptances by locals of the new Oil. Chemical and Atomic Workers' union (CIO) were reported in some firms operating in Texas, following authorization by the OCAW president on March 15, acting under authority granted to him by the union's bargaining policy committee. In June 1954, the Oil Workers union, now part of the OCAW 7 had announced a campaign for a 5-percent increase, or its equivalent,

Aircraft. A number of aircraft firms and the CIO Auto Workers and the AFL Machinists agreed on contract changes similar to those reached earlier in other parts of the industry. Wage rates were increased about 3 percent and fringe benefits liberalized. The specific form and size of the wage increase and the changes in fringe benefits varied somewhat among the separate contracts, though changes in insurance provisions were generally provided.

¹ See Monthly Labor Review, January 1955 (p. 103).

See Monthly Labor Review, March 1955 (p. 336).

[?] See page 879 of this issue.

See Monthly Labor Review, April 1955 (p. 461).

The Auto Workers signed agreements with Douglas Aircraft Co., Inc., for approximately 17,000 employees in Long Beach, Calif., and 6,500 workers in Tulsa, Okla., and with Chance-Vought Aircraft, Inc., for about 7,700 production workers in Dallas, Tex. The Douglas agreements with the Auto Workers, unlike those reached earlier with the Machinists, continued wage escalation.

The Machinists reached agreement with Mc-Donnell Aircraft Corp. of St. Louis for around 8,300 production workers; with Lockheed Aircraft Service, Inc., for about 2,500 employees in California; and, after a 42-day strike, with the Rohr Aircraft Corp., covering 1,600 employees. The Machinists also concluded an agreement with Solar Aircraft Co., covering 2,400 employees at San Diego, and with Pacific Airmotive Corp., also in California, covering 1,100 employees.

Printing. Seven AFL printing-trades unions representing approximately 10,000 Chicago area employees in 300 commercial job shop companies agreed to extend present contracts to June 1956 without a wage increase. These agreements, with members of the Franklin Association (a trade organization of job print shops), provided increased employer-paid health and welfare benefits and extended benefits to dependents. The agreement, according to union and employer representatives, was intended to retain Chicago's position in the industry, attract new business, and assure continued high employment to union members. Establishment of a uniform expiration date for contracts covering various trades was intended to enable employers to bid on jobs far in advance with the knowledge that there will be no increase in wage scales. The agreement reached last fall by the International Typographical Union (AFL) with the same group of shops, providing for increased wage rates and supplementary benefits, also expires in June 1956.

An agreement providing a \$5.80 weekly package of wage and welfare improvements for 3,400 employees of 9 major New York newspapers was ratified by ITU members in mid-March. The agreement also provides a "basis of probable" settlement on use of teletypesetting and photosetting processes.

Electrical Equipment. A 5-cent-an-hour acrossthe-board increase, 3 weeks' vacation for employees with 10 years' service, and other contract improvements were provided, after a 1-day strike, in an agreement on March 7 between the CIO Electrical Workers, representing approximately 2,200 production workers in New Jersey plants, and the Allen B. Dumont Laboratories, Inc. An unusual clause provided for a 1-day credit for each 4 months' perfect attendance toward a maximum yearly bonus of 3 days' pay.

In the 47th day of a strike over wages by members of the CIO Newspaper Guild of New York, the publisher of the 114-year-old Brooklyn Eagle announced on March 16 that "we do not intend ever to resume the publication of this newspaper." The observance of Guild members' picket lines by members of other craft unions had led to suspension of publication for the first time in the newspaper's history.

Maritime. The Sailors' Union of the Pacific (AFL) proposed a plan to reduce the size of crews and cut the amount of overtime work, if necessary, on certain types of ships, to enable United States ocean shipping to compete with foreign-flag bulk cargo ships. On an experimental basis, the plan had been incorporated in one West Coast collective bargaining agreement and reduced the crew of the freighter involved by 7 members. The plan was disclosed in mid-March, just prior to a meeting in Washington of the Conference of American Maritime Unions, organized in January 1954 to deal with maritime problems of common interest. It brought immediate sharp reactions from CIO maritime unions. Differences led the AFL unions to withdraw from the meeting of the conference.

An agreement ratified late in March by the Atlantic and Gulf District of the Seafarers' International Union (AFL) provides that seatime seniority is accrued regardless of which steamship company employs a seaman. The district reportedly has contracts with more than 70 shipping companies. A union official called the "pool" of seatime on this basis a "real protection" of the employment rights of scamen. In moving from one ship to another or from one company to another, the seaman with the longest record of service, according to the union, will have first rights when work is offered.

^{*} See Monthly Labor Review, March 1954 (p. 300).

Other Settlements. Wage increases of 6 to 9 cents an hour were agreed to in contracts between 17 cement plants in Northwestern Pennsylvania and the AFL Cement Workers Union. The increases, effective April 1, affect approximately 6,000 employees.

A 5-cent wage increase, effective March 1, for about 8,000 machine operators, upkeep men, and apprentices in the glass container industry was agreed to by the AFL Glass Bottle Blowers Association and the Glass Container Manufacturers Institute, representing 35 major companies. A guaranteed annual wage study is to be made in preparation for next year's negotiations.

Wage increases of 7 cents an hour for hourly workers and adjustments for salaried employees were announced for approximately 13,000 employees in unorganized plants of Carbide and Carbon Chemicals Co. and E. I. du Pont de Nemours and Co. in West Virginia.

Military Pay

On March 31, the President of the United States signed Public Law 20 (84th Cong.), providing pay increases for 1.7 million members of the Armed Forces. Effective on April 1, the increases apply to officers with 3 or more years' service and enlisted men and warrant officers with at least 2 years' service. The pay adjustments range from 6 to 27 percent and average 12 percent for career personnel; their cost is estimated at \$745 million annually. They are designed to make a military career more attractive and thus reduce turnover in the Armed Forces.

Union Developments

During March, leaders of both the AFL and the CIO warned member unions to guard against attempts of unaffiliated Communist-dominated labor unions to infiltrate their ranks in order to evade the Communist Control Act of 1954. General Counsel Arthur J. Goldberg urged CIO unions to draw a distinction between "genuine rank-and-file rebellion against Communist leadership" and "the wholly or partially camouflaged attempts of the

leadership itself to seek shelter within the covering cloak of CIO affiliations." The warning paralleled a previous statement by President George Meany, following the AFL executive council's refusal to approve the merger of the leftwing Fur and Leather Workers' Union with the AFL Meat Cutters. 10

Late in March, an official of the Meat Cutters' union announced that efforts to rid the Fur union of pro-Communist elements would soon be under way. The president of the Meat Cutters' New York-New Jersey district council indicated that its bylaws had been overhauled to provide specific machinery for keeping Communists or Communist sympathizers from holding membership in any local affiliated with the council.¹¹

In another development, union leaders representing 10,000 International Harvester Co. employees voted on March 19 to affiliate with the UAW-CIO. Their union (Farm Equipment Workers) was merged with the United Electrical Workers (Ind.) several years ago. The recent move requires ratification by a majority of the Farm union's 12 locals. The UAW-CIO has defeated the Farm Equipment Workers in several NLRB elections in plants of the International Harvester Co., and now represents about 22,000 employees of the company.

The New York district council of the independent International Longshoremen's Association, representing approximately 20,000 long-shoremen, voted unanimously on March 9 to affiliate with the AFL Teamsters, after plans for this affiliation had been discussed by the ILA executive board. Discussions were held later in the month with representatives of the Teamsters' union but no further action had been taken by the end of the month.

The Oil, Chemical and Atomic Workers' International Union (CIO) was formally established on March 4, following the adoption of a constitution by unanimous vote of more than 900 convention delegates. The new organization resulted from the merger of the Oil Workers International Union and the Gas, Coke and Chemical Workers of America. These two CIO affiliates had been in joint convention for a week, amending a proposed constitution drafted by a rank-and-file committee last August 12 and setting the basic policy of the

¹⁶ See Monthly Labor Review, April 1955 (p. 459).

n Ibid.

¹¹ See Monthly Labor Review, November 1954 (p. 1254).

new organization. The union claims approximately 200,000 members, 600 functioning locals, and about 1,200 collective bargaining agreements.

The CIO Steelworkers' executive board early in March authorized its officers to sign the AFL-CIO no-raiding pact, leaving only two CIO unions—Shipbuilders and Lithographers—which have not accepted it. The board also ratified the AFL-CIO merger proposals and heard an address by AFL President Meany. The Steelworkers' president, David McDonald, in discussing the union's bargaining plans for 1955 stated, "Our agreements provide for wage reopening only," ruling out any speculation that wage guarantees would be sought. Later in the month, he participated with officials of Continental Can Co.

and the American Can Co. in a series of conferences and plant visits, as part of a union-management program to build better day-to-day relations in the companies' plants.

In a somewhat different approach to labor-management problems of joint concern, the AFL Teamsters announced it would join with a number of corporations in supporting the Economics of Distribution Foundation—a nonprofit research organization whose primary aim is to work out ways to get farm and factory products to the consumer more economically, and thus permit lower prices. This new foundation will have a board of directors made up of industry, union, and civic leaders and an advisory panel of university professors.

Book Reviews and Notes

Special Reviews

Determining the Business Outlook. Edited by Herbert V. Prochnow. New York, Harper & Brothers, 1954. 445 pp., bibliographies, charts. \$6.50.

The Economics of Recession and Revival—An Interpretation of 1937-38. By Kenneth D. Roose. New Haven, Yale University Press, 1954. 280 pp., bibliography, charts. (Yale Studies in Economics, 2.) \$4.

In the first two chapters of Determining the Business Outlook, the importance of forecasting to the business community is stressed and the nature of business fluctuations—seasonal, cyclical, and secular-is described. The final chapter reviews some of the longtime trends in the American economy. In between are 16 chapters written by experts from government, industry, and academic life, each dealing with a set of important related economic indicators. In fact, more than 100 individual statistical series, ranging from the consumer price index and the gross national product to total raw-wool consumption and passenger-car annual scrappage rates, are described and evaluated, all from the standpoint of their usefulness for forecasting. The treatment of the materials is almost uniformly good and the volume constitutes a very useful primer on the characteristics of economic and statistical indicators which have to be assessed by the practitioner making a forecast of coming business events.

In The Economics of Recession and Revival, Professor Roose uses over 100 series for quite a different purpose, i. e., to assess the causes of the downturn and subsequent recovery in business which occurred almost two decades ago. He describes that period, as follows: "... the rapidity of the decline in income and production during the 9 months, September 1937 to June 1938, was without precedent in American history.

Equally abruptly the recession ended and national income and production began to rise again." At the beginning of the book are listed 41 specific reasons which various authorities have cited as causes of the downturn in 1937, and another 8 are cited as reasons for the recovery in 1938. Professor Roose evaluates in detail the relative importance of all these economic variables in the political and social climate of the late thirties. Readers will be interested in his conclusions as to the causes of this interesting episode of business history. The most important cause of the recession is attributed to Government action: operation of the undistributed-profits tax, reduction of Government spending, and Federal Reserve Board action on excess reserves. All of these, he holds, operated to reduce the profitability of investment. Similarly, the causes of the revival are also laid to Government action: modifications in the undistributed-profits and capital-gains taxes and resumption of a deficit-spending program, which created favorable business anticipations.

> —SEYMOUR L. WOLFBEIN Bureau of Labor Statistics

Employment Expansion and Population Growth— The California Experience, 1900–1950. By Margaret S. Gordon. Berkeley and Los Angeles, University of California Press, 1954. 192 pp., charts. \$3.50.

This account of how California's rapidly growing population has been employed fills a conspicuous gap in economic statistics. Where the millions who have poured across the Golden State's borders have found work has long been a question of great interest to social scientists.

Margaret Gordon does an admirable job of answering this question by charting the impact of immigration and wars on the State's industrial employment. The book describes the changing industrial composition and relates shifts in manufacturing employment to the influence of both world wars, the Korean incident, and construction cycles. An analysis of the differences between unemployment rates for the Nation and California shows considerable resourcefulness.

One of the main conclusions of the book is that California's population growth has closely paralleled employment expansion. The author establishes the fact that industrial expansion is to a

great extent responsible for population growth, but does not offer a completely satisfactory explanation of why population and economic expansion run neck and neck. Do people determine what the employment opportunities in California are before they move? If so, how do they make this determination? The author mentions letters. employer recruiting, and the role of public and private employment agencies. At best, these sources of information would give a prospective migrant something less than a perfect picture of the labor market, and at worst, little more than rumor. If many moves to California are based on misinformation, why have there not been periods in addition to the thirties in which population grew so much faster than employment opportunities that mass unemployment resulted?

The best of several theories advanced by the author seems to be that many of the immigrants who were unable to find jobs returned to their home towns, that net immigration differs considerably from gross immigration. With this explanation, it is not necessary to make the rather unrealistic assumption that prospective immigrants carefully follow California's economic temperature. If the unlucky job seekers tend to leave the State, a balance between population growth and economic expansion is maintained even if people go to California with no other motive than to live in a good climate.

-RAYMOND D. LARSON Bureau of Labor Statistics

The French Labor Movement. By Val R. Lorwin. Cambridge, Mass., Harvard University Press, 1954. xix, 346 pp., bibliography. (Wertheim Publications in Industrial Relations.) \$6.

Professor Lorwin has combined thorough research, objective analysis, and sympathetic understanding to produce a rare volume. The study comprises a historical review of the development of French workers' organizations and a description of their present structure and day-to-day functioning. There are valuable documentary appendixes, and an excellent annotated bibliography which explores and helps evaluate existing materials in the field.

Of greatest value to the reader, however, is the synthesis of work, research, and insight with which the author guides the reader toward a

sophisticated appreciation of that political, economic, and social puzzle which is the French labor movement. Lorwin has a peculiar ability to point up his research with a sentence of analysis which gives one the feel of the unique French situation. His criticism of French labor's preoccupation with ultimate goals, for instance, is summed up in a description of one of the early leaders as a "rare spirit . . . who knew how to work for the future by creating in the present!" Or. in his summary of the extreme "leftism" of early French labor history: "Revolution was the opium of the working people for whom religion had no appeal . . . Extremism is by its nature shriller than reformism . . . Is there a Gresham's law of intellectual currency?"

Two factors have contrived to make the French labor situation a source of worry to the free world. Nurtured in political extremism, the union structure was designed to gain more from the Government than from the employer. Industry and plant-level economic activities did not develop to a degree which strengthened free institutions as the bargaining representatives of workers. Concepts such as grievance machinery and exclusive collective bargaining rights gave way to multiunion bargaining, "competitive, irresponsible, and uneasy." Under such bargaining arrangements, strong employer groups face divided labor groups, with each union representing an amorphous group whose members, being reluctant to pay dues high enough or regularly enough to sustain unions with the necessary strength, have, at most, an ideological or emotional rather than an economic relationship to the labor organization.

On a par with the union structure problem is, of course, the problem of Communist strength. Professor Lorwin identifies the complex reasons for French workers' persistence in viewing the Communist-controlled CGT as the most "left" of the labor organizations, instead of simply as the agent of a foreign power. He performs an excellent service for these days, when some anti-Communist effort depends too fully on quick conclusions derived from a factual vacuum; he supplies the facts which can better serve the anti-Communist cause. He gives the student citation after citation of Communist maneuvering and sacrifice of workers' interests to Soviet foreign policy objectives. In doing so, he differentiates

between the Communist ideology and the older syndicalist ideologies on whose reputations the Communists now thrive.

Professor Lorwin sees some hope for the French labor movement if labor, management, and Government perform needed tasks. These tasks he outlines in a convincing concluding chapter which stresses the complexities of the problems, and avoids easy, one-solution panaceas.

> -Morris Weisz Foreign Operations Administration (Paris)

The System of Industrial Relations in Great Britain, Its History, Law and Institutions. Edited by Allan Flanders and H. A. Clegg. Oxford, Basil Blackwell, 1954. 380 pp. 30s.

General Union: A Study of the National Union of General and Municipal Workers. By H. A. Clegg. Oxford, Basil Blackwell, 1954. 358 pp. 27s. 6d. net.

The mantle first borne by the Webbs and then by Cole, among students of the labor movement and of industrial relations in Great Britain, is now being competed for by a new generation. H. A. Clegg and Allan Flanders of Oxford University are in the forefront of the race.

The System of Industrial Relations in Great Britain, edited by Flanders and Clegg, presents an up-to-date overall view of most of the major facets of the subject. In six excellently written, information-packed essays, the editors and four other specialists analyze the social and historical background, legal framework, trade union organization, employer organization, collective bargaining, and "joint consultation." The emphasis throughout is on institutional factors rather than on statistical or economic analysis. Of special interest are the discussions of some of the problems of national industrywide bargaining—the standard practice in Britain-and of the difficulties of effectuating "joint consultation" to improve the efficiency and democratic character of industry.

Because of the brevity of the volume and the wide scope of the subject, it was not possible to discuss any of the areas in detail. A number of important subtopics, such as personnel-management policies and techniques, wage-payment systems and structures, and labor-management relations at the district and local establishment

level are barely mentioned, and the editors unfortunately omitted a selected bibliography for readers who wish to pursue particular topics in more detail.

Clegg's case study of the National Union of General and Municipal Workers provides a detailed description and analysis of one of the distinctive institutional aspects of the British industrial scene. Second in size only to the other great general union, the Transport and General Workers Union, the NUGMW represents over 800,000 unskilled and semiskilled workers and a small number of skilled workers in more than 250 private, municipal, and nationalized industries and subindustries. Many American readers may be surprised at the description of the organization in terms of "business unionism" and of its stabilizing influence (together with the TGWU) upon the Trades Union Congress.

The study is presented on a topical rather than a chronological basis. There are frequent historical references but only to explain the present, not to describe the past. The five main sections deal with the union's organization and overall growth, its structure and government, its role in selected industries, its relations with other unions, and its effectiveness and democratic nature. Of particular value to American readers are the discussions of the merits of general unionism as compared with industrial and craft unionism, of the problems of securing effective union leadership while preserving democratic processes, of the interaction between a great "business union" and the Labor Party, and of the relations among widely diverse unions belonging to the same national federation. As in the case of the Flanders-Clegg volume, one wishes that the author had carried the discussion of these key topics further.

Although geographical, historical, economic, and cultural factors have produced many profound differences between Britian and the United States, these two volumes have much to offer to American readers. They not only are extremely enlightening about the industrial-relations experiences and problems of Britain, but also contain many stimulating ideas on a variety of issues of current concern in the American scene.

-MILTON DERBER Institute of Labor and Industrial Relations University of Illinois

Cost and Standards of Living

- Current Living Costs as Related to Standards of Public Assistance in Pennsylvania as of December 1954. Harrisburg, Department of Public Assistance, 1955. 32 pp., map.
- Quantity and Cost Budgets for Two Income Levels—Prices for the San Francisco Bay Area, September 1954. [Berkeley], University of California, Heller Committee for Research in Social Economics, 1955. 93 pp., chart.

Budgets were priced for the family of a salaried worker and that of a wage earner.

Methods Used in a Survey of Family Income, Expenditures, and Living Costs, Panama City, 1952. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955. 44 pp.; processed. (Foreign and International Labor Information Report.) Free.

A summary of the data obtained in the survey was published in the February 1955 Monthly Labor Review

(p. 204).

Levnadskostnaderna på Landsbygden, år 1951. Stockholm, Socialstyrelsen, 1955. 103 pp., charts. Kr. 1.75.

Report on family expenditures in rural districts of Sweden, 1951. A table of contents, a summary, and a glossary in English are provided.

Employment

- Alabama Employment and Earnings, by Industry, 1952-54.

 Montgomery, Department of Industrial Relations.

 Division of Research and Information, 1955. 17 pp,
- Georgia Employment and Earnings, by Industry, 1963-54, [Atlanta], Department of Labor, Employment Security Agency, 1955. 62 pp., charts.
- The Farm Placement Program, 1955. (In Employment Security Review, U. S. Department of Labor, Bureau of Employment Security, U. S. Employment Service, Washington, March 1955, pp. 1-44, charts, maps, illus. 20 cents, Superintendent of Documents, Washington.)
- Trends in the Employment of College and University Graduates in Business and Industry—Ninth Annual Report, 1954. By Frank S. Endicott. Evanston, Ill., Northwestern University, 1955. 12 pp.

Handicapped

- A Decade of Progress in Employing the Handicapped. Washington, U. S. Department of Health, Education, and Welfare, Office of Vocational Rehabilitation, and the President's Committee on Employment of the Physically Handicapped, 1954. 9 pp.; processed. Free.
- Guide for Employers in Hiring the Physically Handicapped.

 New York, National Association of Manufacturers,

Employee Relations Division, 1955. 31 pp., bibliography.

Presents successful techniques for utilizing the abilities of the handicapped through sound placement on the job.

Mental Health and Human Relations in Industry. Edited by T. M. Ling. London, H. K. Lewis & Co., Ltd., 1954. 265 pp., bibliographies, charts. 21s.

Record of work done at the Roffey Park Institute and Rehabilitation Center established by British industry after the war for neurosis cases.

Industrial Accidents and Accident Prevention

Accident Causes and Cause Coding. By Frank S. McElroy. Washington, U. S. Department of Labor, Bureau of Labor Standards, 1955. 16 pp. 15 cents, Superintendent of Documents, Washington.

Number 1 in a series of articles, prepared for the President's Conference on Occupational Safety, on how to use injury statistics to prevent occupational accidents. Titles of the three other pamphlets available in the series are: Estimating Costs of Industrial Accidents, Investigation of Accidents for Cause and Remedy, and Work Injury Rates (10, 5, and 10 cents, respectively).

- Company Safety Programs. Washington, Bureau of National Affairs, Inc., 1955. 21 pp. (Personnel Policies Forum Survey 29.) \$1.
- Fatalities at Pennsylvania Anthracite Mines, 1954. By Joseph V. Mather. Washington, U. S. Department of the Interior, Bureau of Mines, [1955]. 18 pp. (Mineral Industry Surveys; HSS 435.)
- Injury Frequency Rates in Maine Manufacturing, 1954.
 Augusta, Department of Labor and Industry, Division of Research and Statistics, [1955]. 7 pp., chart; processed. (Bull. 239.)
- Injuries and Accident Causes in Warehousing Operations.

 By Frank S. McElroy and George R. McCormack.

 Washington, U. S. Department of Labor, Bureau of
 Labor Statistics, 1955. 52 pp. (Bull. 1174.) 40
 cents, Superintendent of Documents, Washington.

Industrial Hygiene

Health Examinations in Industry. By C. A. D'Alonzo, M.D., and S. M. Rodgers. (In Industrial Medicine and Surgery, Chicago, February 1955, pp. 75-83. 75 cents.)

Summary of findings in 27,718 physical examinations of male employees, ranging in age from 18 to 65, of E. I. du Pont de Nemours and Co., in the 1-year period, June 26, 1953, to June 25, 1954.

- Research in Industrial Health in the Chemical Industry. By M. W. Goldblatt. (In British Journal of Industrial Medicine, London, January 1955, pp. 1-20, diagrams, illus. 12s. 6d.)
- Epidemiological Studies of Coal Miners' Pneumoconioris in Great Britain. By C. M. Fletcher, M.D. (In

- A.M.A. Archives of Industrial Health, Chicago, January 1955, pp. 29-41, bibliography, charts, map. \$1.)
- Industrial Asthma and Bronchitis. By G. W. H. Schepers, M.D. (In Industrial Medicine and Surgery, Chicago, February 1955, pp. 53-61, bibliography. 75 cents.)
- Occupational and Related Dermatoses—Abstracts from the Literature, July 1943 to December 1953, Inclusive. By Donald J. Birmingham, and Paul C. Campbell, Jr. Washington, U. S. Department of Health, Education, and Welfare, Public Health Service, 1954. 183 pp. (PHS Publication 364; Public Health Bibliography Series, 12.) 65 cents, Superintendent of Documents, Washington.

Industrial Relations

The Influence of Plant Size on Industrial Relations. By Sherrill Cleland. Princeton, N. J., Princeton University, Department of Economics and Sociology, Industrial Relations Section, 1955. 65 pp. \$2. (Research Report Series, 89.)

A brief article on this report appears in this issue of the Monthly Labor Review (p. 555).

- The Impact of Labor Disputes Upon Coal Consumption. By C. Lawrence Christenson. (In American Economic Review, Menasha, Wis., March 1955, pp. 79-112. charts. \$1.50.)
- Grievance Machinery and Strikes in Australia. By James W. Kuhn. (In Industrial and Labor Relations Review, Ithaca, N. Y., January 1955, pp. 169-176. \$1.50.)

Compares Australian and United States experience.

Labor Legislation

- Federal Laws, General Wage and Rule Agreements, Decisions, Awards and Orders Governing Employees Engaged in Train, Yard and Dining Car Service on Railroads in the United States. Cleveland, Ohio, Brotherhood of Railroad Trainmen, [1954?]. 909 pp.
- Protective Labor Legislation and its Administration in Tennessee. By J. Fred Holly and Bevars D. Mabry. Knoxville, University of Tennessee Press, 1955. 216 pp., bibliography.
- Legal Protection of Labor in Contemporary India. By Oscar Ornati. (In Labor Law Journal, Chicago, March 1955, pp. 182-190, 205. \$1.)

Labor Organizations

- Bibliography on Unionization of Professional Engineers.

 New York, Engineering Societies Library, 1954.

 8 pp.; processed. (Bibliography 10.) \$2.
- The Business Agent and His Union. By Wilma Rule Krauss and Van Dusen Kennedy. Berkeley, University of California, Institute of Industrial Relations, 1955. 54 pp., bibliography. 25 cents.

Unionism and Personnel Practices in the Southeast. By Ellsworth Steele, William R. Myles, Sherwood C. McIntyre. (In Industrial and Labor Relations Review, Ithaca, N. Y., January 1955, pp. 253-264, charts. \$1.50.)

Report on a comparative survey of 256 union and 338 nonunion plants, designed to "isolate the extent and character of union influence on personnel practice."

Toward the History of the Jewish Labor Movement. New York, [Yiddish Scientific Institute?], 1954. 36 pp. (Reprinted from Yivo Annual of Jewish Social Science, Vol. IX, pp. 363-396.)

Proceedings of first session of editorial advisory council of Yivo History of the Jewish Labor Movement in the United States.

- Forty-third Annual Report on Labor Organization in Canada. Ottawa, Department of Labor, Economics and Research Branch, 1954. 116 pp., charts, map.
- Colonial Trade Unions. By Walter Bowen. London, Fabian Society, 1954. 28 pp., bibliography. (Research Series, 167.) 1s. 6d.

Manpower

Health Manpower Source Book: Section 6, Medical Record Librarians. By Maryland Y. Pennell, Marion E. Altenderfer, Olive G. Johnson. Washington, U. 8. Department of Health, Education, and Welfare, Public Health Service, 1954. 41 pp., bibliography, survey form. (PHS Publication 263, Section 6.) 30 cents, Superintendent of Documents, Washington.

Sections 1 to 3 of this source book deal, respectively, with physicians, nursing personnel, and medical social workers; section 4 gives data on 16 health occupations, by county; section 5 is an overall report on occupations in health-service industries, based on 1950 Population Census data.

Military Manpower Requirements and Supply, 1955-59.
By Stuart A. Pettingill and Stuart H. Garfinkle.
Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955. 14 pp.; processed.
Free.

Medical Care and Health Insurance

Financing Hospital Care in the United States: Volume 3, Financing Hospital Care for Nonwage and Low-Income Groups. Edited by Harry Becker. New York, McGraw-Hill Book Co., Inc., Blakiston Division, 1955. xviii, 110 pp., bibliography, charts. \$2.50.

Volume 1 of this series of studies by the Commission on Financing of Hospital Care deals with "Factors Affecting the Costs of Hospital Care," and volume 2, with "Prepayment and the Community."

Report on a Study of Sickness and Disability Insurance. St. Paul, Minn., Department of Employment Security [1955]. 103 pp., survey forms.

Report on a study of Minnesota programs for insuring workers against wage loss due to sickness and disability not work connected, with recommendations. Includes a tabular comparison of temporary disability-insurance benefits under the laws of California, Connecticut, New Jersey, New York, and Rhode Island, and the Federal Railroad Unemployment Insurance Act.

A Survey of Voluntary Health Insurance in California. San Francisco, California State Chamber of Commerce, 1954. 48 pp., survey forms.

Occupations

- Occupations and Careers. By Walter James Greenleaf. New York, McGraw-Hill Book Co., Inc., 1955. 605 pp., bibliographies, charts, Elus. \$4.20.
- Facts About Nursing—A Statistical Summary, 1954 Edition.
 New York, American Nurses' Association, [19547].
 166 pp., charts, maps. \$1.
- Psychiatric Social Worker. By H. Alan Robinson. Peapack, N. J., Personnel Services, Inc., 1955. 6 pp. (Occupational Abstract 180.) 50 cents.

Occupations covered in other recent numbers (175 to 179) in this series include secondary school teachers, electrical engineers, receptionists, registered nurses, and training directors.

Personnel Management and Practices

- Cases in Management. By Henry M. Cruickshank and Keith Davis. Homewood, Ill., Richard D. Irwin, Inc., 1954. 221 pp., diagrams, forms. \$4.35.
- Cases in Personnel Administration. By Ben A. Lindberg. New York, Prentice-Hall, Inc., 1954. 586 pp., bibliography, forms, illus. \$6.50.
- Personnel Management and Labor Relations. By Lawrence C. Lovejoy. New York, Alexander Hamilton Institute, 1954. 394 pp.
- Personnel Practices in Factory and Office (Fifth Edition).

 New York, National Industrial Conference Board.
 Inc., 1954. 128 pp. (Studies in Personnel Policy, 145.)
- Personnel Development Practices in the Petroleum and Natural-Gas Industry, 1954. New York, American Petroleum Institute, 1954. 82 pp., bibliography.
- A Study of Personnel Practices for College and University
 Office and Clerical Workers. By Wilbur Donald
 Albright. Champaign, Ill., College and University
 Personnel Association, 1954. 131 pp., bibliography.
 \$2.50.
- Human Relations in Small Industry. By John Perry. New York, McGraw-Hill Book Co., Inc., 1954. 313 pp., bibliography. \$5.50.
- Techniques that Produce Teamwork. By Warren H. Schmidt and Paul C. Buchanan. New London,

- Conn., Arthur C. Croft Publications, 1954. 75 pp. \$2.50.
- Better Employee Utilization Through Planned Promotion Programs. Washington, U. S. Department of the Army, 1954. 40 pp. (Civilian Personnel Pamphlet 51.) [30 cents, Superintendent of Documents, Washington.]

Production and Productivity of Labor

Case Study Data on Productivity and Factory Performance:
Copper Tube and Brass Rod. By Vincent H. Arkell.
Washington, U. S. Department of Labor, Bureau of
Labor Statistics, 1955. 110 pp., chart, forms, illus.
(BLS Report 81.) Free.

Other recent reports in this series cover the manufacture of wood furniture, centrifugal pumps, glass containers, metal containers, and paint and varnish (BLS reports 18, 69-71, 79).

Cost Savings Through Standardization, Simplification, Specialization in the Clothing Industry. By Lawrence J. Kaplant. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1954. 57 pp., diagrams. Free.

One of a series of reports prepared for the Foreign Operations Administration on means used by American firms to effect savings in costs and man-hours. Also available are reports for the manufacture of containers and materials-handling equipment.

Employee Understanding and Teamwork for Greater Productivity. By John P. Troxell. New York, National Association of Manufacturers, 1954. 97 pp., bibliography. (Lt. Rush Toland Memorial Study 2.)

The chapters on productivity present a summary of the concepts of productivity and its measurement, comprehensible to the layman as well as to the technician. The discussions of employee-employer relations are balanced and seek to reflect both worker and management attitudes.

Social Security

- Social Security for Farmers. By John C. Ellickson. (In Agricultural Finance Review, U. S. Department of Agriculture, Agricultural Research Service, Washington, November 1954, pp. 1-9. 60 cents, Superintendent of Documents, Washington.)
- Temporary and Permanent Disability Provisions—An Annotated Bibliography, April 1951-January 1955.

 Baltimore, U. S. Department of Health, Education, and Welfare, Social Security Administration, Bureau of Old Age and Survivors Insurance, 1955. 13 pp.; processed.
- Social Insurance in Norway. By Dorothy Burton Skårdal. Oslo, Norwegian Joint Committee on International Social Policy, 1955. 115 pp., chart, illus.

Wages, Hours, and Working Conditions

- Factory Workers' Earnings: Distributions by Straight-Time
 Hourly Earnings, April 1954. Washington, U. S.
 Department of Labor, Bureau of Labor Statistics,
 1955. 33 pp., charts. (Bull. 1179.) 25 cents, Superintendent of Documents, Washington.
- Union Wages and Hours: Building Trades, July 1, 1954.
 By John F. Laciskey. Washington, U. S. Department of Labor, Bureau of Labor Statistics, 1955.
 44 pp. (Bull. 1175.) 30 cents, Superintendent of Documents, Washington.
- Wage Rates, Working Conditions in Eight Construction Trades, [Canada, 1954]. (In Labor Gazette, Department of Labor, Ottawa, February 1955, pp. 202-211. 25 cents.)
- Wage Differentials in the Cotton Textile Industry, 1933-62.
 By Edwin Mansfield. (In Review of Economics and Statistics, Cambridge, Mass., February 1955, pp. 77-82.
 \$2.
- Working Conditions, April 1954, in the Primary Textile Industry, [Canada]. (In Labor Gazette, Department of Labor, Ottawa, February 1955, pp. 212-215. 25 cents.)

Data on standard weekly hours, vacations, holidays, rest periods, bonus and profit-sharing plans, and medical services.

School Teachers' Salaries in Large Cities, 1954-55. New York, The Tax Foundation, Inc., 1955. 24 pp., charts. (Government Finance Brief 1.)

Summary of data obtained by questionnaire from school administrators in 80 cities of over 100,000 population.

- Wage Determinations Under the Sugar Acts. By Ward S. Stevenson and Linwood K. Bailey. (In Sugar Reports, U. S. Department of Agriculture, Commodity Stabilization Service, Sugar Division, Washington, December 1954, pp. 6-18, charts.)
- Factors in Wage Adjustments to Technological Changes. By Martin Segal. (In Industrial and Labor Relations Review, Ithaca, N. Y., January 1955, pp. 217-230. \$1.50.)
- Company Practices in Wage and Salary Administration—A Survey. By Ralph Pulber. (In Personnel, American Management Association, New York, January 1955, pp. 302-309. \$1.75 (\$1.25 to Association members.)
- Wage-Salary Administration. Washington, Bureau of National Affairs, Inc., 1954. 13 pp. (Personnel Policies Forum Survey 28.) \$1.

Miscellaneous

Industrial and Labor Relations Research in Universities— A United States Summary, 1953-64. Edited by Robert L. Aronson. Ithaca, N. Y., Cornell University,

- New York State School of Industrial and Labor Relations, 1954. 48 pp. (Bull. 26.) 35 cents (free to New York State residents).
- Labor's Stake in Capitalism. By Nathan W. Shefferman. Chicago, Labor Relations Associates of Chicago, Inc., 1954. 154 pp.
- Psychology Applied to Human Affairs. By J. Stanley Gray. New York, McGraw-Hill Book Co., Inc., 1954. 581 pp., bibliographies, charts. 2d ed. \$6.

A classroom textbook on the "practical applications of psychology in its various fields of usefulness." Includes several chapters on psychology in industry and one on vocational guidance.

- Zest for Work: Industry Rediscovers the Individual. By Rexford Hersey. New York, Harper & Brothers, 1955. xvi, 270 pp., charts. \$4.
- Report of the Director-General to the European Regional Conference of the International Labor Organization, Geneva, 1955. Geneva, International Labor Office, 1954. 143 pp., charts. \$1. Distributed in United States by Washington Branch of ILO.

This report, prepared for the first European Regional Conference of the International Labor Organisation, reviews conditions affecting economic and social progress in Europe, and discusses differences in labor standards, manpower problems, housing, industrial relations, and the work of the ILO in Europe.

Ceylon Year Book, 1954. Colombo, Department of Census and Statistics, [1954]. xviii, 301 pp., charts, illus.

Includes data on trade unions, wages, strikes, cost of living, public assistance, rehabilitation of the disabled, workmen's compensation, and the cooperative movement.

- Labor Problems and Policy in Pakistan. By A. M. Malik. Karachi, Pakistan Labor Publications, 1954. 168 pp. Rg. 10.
- Retail Trade, Retail Prices and Real Wages in U. S. S. R., [1928-53]. By P. J. D. Wiles. (In Bulletin of the Oxford University Institute of Statistics, Oxford, England, November-December 1954, pp. 373-389. 3s. 6d.)
- Final Results of the Population Census of March 15, 1948:
 Volume III, Population by Occupations. Belgrade,
 Yugoslavia, Federal Statistical Office, 1954. exi, 496
 pp., maps, survey forms.

Presents a breakdown of the economically active population, by broad occupational groupings, for the Federal Republic as well as for the individual republics of Yugo-lavia

Yugoslavia—Between Bast and West. By Thomas Taylor Hammond. New York, Foreign Policy Association, 1954. 61 pp., charts, maps. (Headline Series, 108.) 35 cents.

An overall political, social, and economic picture of Yugoslavia. One chapter discusses the workers' role in the new economic system.

340167--55---6

Current Labor Statistics

A.—Employment and Payrolls

- 590 Table A-1: Estimated total labor force classified by employment status, hours worked, and sex

 591 Table A-2: Employees in populational establishments by industry division
- 591 Table A-2: Employees in nonagricultural establishments, by industry division and group
- 595 Table A-3: Production workers in mining and manufacturing industries
- 598 Table A-4: Indexes of production-worker employment and weekly payrolls in manufacturing industries
- 598 Table A-5: Federal civilian employment by branch and agency group
 - Table A-6: Employees in nonagricultural establishments for selected States 1
 - Table A-7: Employees in manufacturing industries, by State 1
- 599 Table A-8: Insured unemployment under State unemployment insurance programs, by geographic division and State

B.-Labor Turnover

- 600 Table B-1: Monthly labor turnover rates (per 100 employees) in manufacturing industries, by class of turnover
- 601 Table B-2: Monthly labor turnover rates (per 100 employees) in selected groups and industries

C.—Earnings and Hours

- 603 Table C-1: Hours and gross earnings of production workers or nonsupervisory employees
- 619 Table C-2: Gross average weekly earnings of production workers in selected industries, in current and 1947-49 dollars
- 619 Table C-3: Average weekly earnings, gross and net spendable, of production workers in manufacturing industries, in current and 1947-49 dollars
- 620 Table C-4: Average hourly earnings, gross and excluding overtime, of production workers in manufacturing industries
- 620 Table C-5: Indexes of aggregate weekly man-hours in industrial and construction activity
 - Table C-6: Hours and gross earnings of production workers in manufacturing industries for selected States and areas

¹ This table is included in the March, June, September, and December issues of the Review.

Nors.—Beginning with the June 1954 issue, data shown in tables A-2, A-3, A-4, A-5, C-1, C-2, C-3, and C-4 have been revised because of adjustment to more recent benchmark levels. These data cannot be used with those appearing in previous issues of the Monthly Labor Review. Comparable data for earlier years are available upon request to the Bureau of Labor Statistics.

D.—Consumer and Wholesale Prices

- 621 Table D-1: Consumer Price Index—United States average, all items and commodity groups
- 622 Table D-2: Consumer Price Index-United States average, food and its subgroups
- 622 Table D-3: Consumer Price Index—United States average, apparel and its subgroups
- 623 Table D-4: Consumer Price Index-United States average, all items and food
- 623 Table D-5: Consumer Price Index-All items indexes for selected dates, by city
- 624 Table D-6: Consumer Price Index—All items and commodity groups, except food, by city
- 626 Table D-7: Consumer Price Index-Food and its subgroups, by city
- 627 Table D-8: Average retail prices of selected foods
- 628 Table D-9: Indexes of wholesale prices, by group and subgroup of commodities
- 629 Table D-10: Special wholesale price indexes

E.-Work Stoppages

630 Table E-1: Work stoppages resulting from labor-management disputes

F .- Building and Construction

- 631 Table F-1: Expenditures for new construction
- 632 Table F-2: Contract awards: Public construction, by ownership and type of
- 633 Table F-3: Building permit activity: Valuation, by private-public ownership, class of construction, and type of building.
- 633 Table F-4: Building permit activity: Valuation, by class of construction and geographic region
- 634 Table F-5: Building permit activity: Valuation, by metropolitan-nonmetropolitan location and State
- 635 Table F-6: Number of new permanent nonfarm dwelling units started, by ownership and location, and construction cost

A: Employment and Payrolls

TABLE A-1: Estimated total labor force classified by employment status, hours worked, and sex

the second of the last and the last				(In thou	ands[
A - The Section of the last	Pars.			Re	timated	number	of person	s 16 year	s of age	and over			
and August Lawrence		1958	17-					1	954 *	-	58-		
Labor force status	Mar.	Feb.	Jan.	Dec.	Nev.	Oet.	Sept.	Aug.	July 1	June	May	Apr.	Mar.
						Tot	al, both	teles					
Total labor force	66, 840	66, 550	66, 700	66, 811	67, 909	68, 190	68, 565	06, 856	68, 824	68, 788	67, 786	67, 438	67, 216
Civilian labor force. Unemployment Unemployed 4 weeks or less Unemployed 5-10 weeks. Unemployed 11-14 weeks. Unemployed 11-14 weeks. Unemployed 18-26 weeks. Unemployed 18-26 weeks. Unemployed 18-26 weeks. Employment Worked 34 hours or more. Worked 35-36 hours Worked 11-46 hours With a lob but not at work 4. Agricultural. Worked 35 hours or more. Worked 16-34 hours	63, 654 3, 176 964 7965 356 615 447 60, 477 54, 785 45, 241 1, 678 5, 618 2, 241 1, 678 2, 243 1, 678 2, 243 1, 678 2, 273 976 249 194	63, 321 3, 383 1, 388 893 377 824 450 56, 938 54, 854 44, 741 5, 935 2, 265 1, 914 3, 519 1, 604 292 292	63, 497 3, 347 1, 329 881 415 40, 150 54, 853 44, 074 6, 606 2, 170 2, 004 5, 297 3, 551 1, 167 205 274	63, 526 2, 838 1, 164 725 341 331 331 36, 688 55, 363 45, 968 5, 891 2, 070 1, 435 5, 325 3, 768 977 302 259	64, 624 2, 863 1, 274 705 183 379 252 61, 731 86, 577 40, 506 11, 195 2, 322 16, 154 4, 566 1, 154 259 171	64, 882 2, 741 1, 129 535 181 608 391 62, 141 54, 000 7, 144 2, 194 1, 899 7, 239 5, 353 1, 464 128	65, 243 3, 099 1, 284 642 341 451 383 62, 144 54, 618 23, 999 25, 559 1, 644 1, 527 5, 684 1, 521 97	66, 522 3, 245 1, 260 847 280 65, 276 56, 340 42, 516 5, 727 1, 753 6, 926 5, 164 1, 214 327 221	65, 494 3, 346 1, 394 539 510 839 62, 148 54, 661 23, 905 1, 866 7, 833 7, 496 8, 324 1, 634 319 150	65, 445 8, 347 1, 628 236 546 293 62, 096 64, 470 43, 502 6, 229 1, 904 8, 932 1, 336 234 128	64, 425 3, 305 1, 157 764 336 672 375 61, 119 64, 291 2, 133 1, 391 6, 211 2, 133 1, 405 1, 4	64, 003 3, 405 1, 190 803 740 80, 896 64, 622 43, 003 6, 490 2, 379 2, 090 6, 076 4, 281 1, 336 283 226	63, 82 8, 72 1, 30 91 65, 22 66, 10 64, 22 6, 25 6, 25 6, 27 6, 27 6, 27 6, 27 6, 27 7, 20 1, 70 1, 10 17
							Males						
Total labor force	47, 226	46, 922	47, 044	47,005	47, 426	47, 586	46,007	48, 964	45, 945	48, 619	47, 791	47, 671	47, 408
Civilian labor force. Unemployment. Employment. Nonagricultural. Worked 35 hours or more. Worked 15-36 hours. Worked 16-36 hours. With a job but not at work *. Agricultura. Worked 35 hours or more. Worked 15-36 hours. Worked 15-36 hours. Worked 16-36 hours. Worked 16-36 hours.	44, 078 2, 253 41, 795 36, 772 31, 946 2, 766 981 1, 079 5, 023 4, 005 630 212 186	43, 731 2, 433 41, 301 36, 680 31, 481 3, 036 972 1, 190 4, 021 3, 338 757 269 256	43, 879 2, 395 41, 485 36, 732 31, 041 3, 454 972 1, 265 4, 758 8, 378 804 206 245	43, 759 1, 966 41, 762 36, 964 32, 971 2, 972 900 1, 011 4, 808 3, 600 711 256 241	44, 180 1, 875 42, 305 87, 134 28, 956 6, 296 917 1, 026 5, 171 4, 185 639 206 181	44, 317 1, 798 42, 829 36, 792 30, 780 8, 782 864 1, 366 5, 730 4, 579 822 201 128	44, 724 1, 968 42, 730 36, 905 17, 978 16, 118 814 1, 994 8, 825 4, 750 841 144 91	45, 699 2, 152 43, 518 87, 712 30, 699 3, 156 727 3, 129 5, 806 4, 578 745 270 213	45, 198 2, 296 48, 432 37, 426 16, 675 15, 089 835 4, 827 6, 006 4, 667 978 226 145	48, 317 2, 194 43, 123 37, 100 31, 355 3, 308 762 1, 673 6, 023 5, 135 621 145 123	44, 471 2, 197 42, 274 36, 660 31, 184 3, 241 956 1, 279 5, 614 4, 502 781 214 137	44, 337 2, 343 41, 993 36, 692 31, 100 3, 267 951 1, 344 5, 311 3, 987 891 224 229	44, 057 2, 582 41, 504 36, 337 81, 219 2, 944 1, 940 1, 134 5, 167 4, 062 987 261 167
							Females						
Total labor force	19, 614	19, 628	19, 655	19, 806	20, 484	20, 604	20, 559	19, 892	19, 877	20, 170	19, 995	19, 767	19, 810
Olvilian labor force Unemployment Employment Nonagricultural Worked 35 hours or more. Worked 15-34 hours Worked 16-34 hours Worked 16-34 hours Worked 15-34 hours Worked 35 hours or more. Worked 35 hours or more. Worked 15-34 hours Worked 16-14 hours Worked 16-14 hours'	19, 876 863 18, 683 18, 014 13, 302 2, 852 1, 259 600 919 289 356 37 8	19, 590 952 18, 638 18, 174 13, 263 2, 898 1, 293 720 464 181 247 22 14	19, 617 952 18, 666 18, 122 13, 034 3, 151 1, 198 739 644 173 303 30 30 29	19, 767 841 18, 925 18, 408 13, 887 2, 919 1, 178 424 517 188 266 46 17	20, 445 1, 018 19, 427 18, 444 11, 550 4, 909 1, 406 828 983 443 467 53 20	20, 865 945 19, 619 18, 110 12, 885 3, 302 1, 330 1, 509 778 642 94 0	20, 520 1, 106 19, 413 17, 713 6, 620 9, 441 1, 169 1, 081 1, 701 933 686 76 6	19, 853 1, 693 18, 790 17, 638 11, 816 2, 571 1, 025 2, 226 1, 122 588 470 08 7	19, 837 1, 121 18, 716 17, 235 8, 263 7, 916 1, 051 3, 006 1, 461 669 705 92	20, 129 1, 153 18, 975 17, 370 12, 141 2, 992 1, 142 1, 164 1, 665 797 716 80	19, 954 1, 108 18, 846 17, 637 12, 775 2, 973 1, 177 712 1, 206 454 675 71 20	19, 726 1, 121 18, 605 17, 840 12, 803 3, 322 1, 398 715 765 244 445 88 17	19, 768 1, 173 18, 596 17, 898 13, 072 2, 860 1, 324 631 708 242 413 48

^{*} Excludes persons engaged only in incidental unpaid family work (less than 18 hours); these persons are classified as not in the labor force.
* Includes persons who had a job or business, but who did not work during the census week because of illness, bad weather, vacation, labor dispute, or because of temporary layoff with definite instructions to return to work within 30 days of layoff. Does not include unpaid family workers.

TABLE A-2: Employees in nonagricultural establishments, by industry division and group

In thousands! Annual aver-1955 1954 Industry group and industry June March Feb. May Mar. Jan. Oct. 1982 Dec. Nov. Bept. Aug. July Apr. 47, 935 47, 848 48, 308 49, 248 47, 786 47, 781 49, 505 48, 827 48, 526 48, 045 47, 808 48, 137 46,068 Total employees. 48, 608 844 105. 7 30. 8 28. 6 17. 4 716 80. 7 31. 9 24. 8 13. 4 93. 8 29. 4 28. 3 15. 1 92.1 29.0 27.6 14.7 93. 7 29. 4 28. 3 15. 0 93. 1 30. 5 26. 9 14. 8 90, 4 33, 4 22, 6 13, 6 98. 4 34. 1 28. 3 15. 0 Copper..... Lead and sine. 31.4 202.7 25.0 Crude-petroleum and natural-gas pro-298, 1 288.4 200.3 201.0 200. 9 293. 2 291. 2 291, 8 204. 8 268 S 987.3 302.5 99.0 50.2 97.1 97.7 101.5 103. 2 101.0 108. 8 Nonmetallic mining and quarrying... 109.7 104.6 105.0 2, 285 410 161, 9 247, 7 2, 353 421 167, 3 254, 1 2, 851 612 297. 3 324. 9 Contract construction.

Nonbuilding construction.

Highway and street.

Other nonbuilding construction...... 2, 39 2,724 584 251,1 302,7 2, 777 584 273. 1 810. 6 2,795 509 291.4 817.5 243. 6 306. 7 Building construction..... 1,875 1,932 2,071 2, 170 2, 193 2, 219 2, 239 2, 196 2, 147 742.4 779.0 802.5 867.8 General contractors..... 850. 2 912. 6 926. 1 945. 6 962. 2 944.0 918. 4 944.5 1, 132. 8 1, 162. 8 1, 220. 4 1, 257. 8 1, 206. 4 1, 273. 8 1, 277. 2 1, 251. 9 1, 228. 4 1, 191. 7 1, 169. 9 1, 157. 8 1, 181. 2 1, 170. 8 200. 2 265. 5 307. 8 311. 9 313. 8 312. 8 313. 3 304. 6 207. 4 202. 0 250. 1 280. 2 203. 1 287. 7 124. 3 122. 8 136. 7 145. 4 140. 4 165. 0 165. 0 165. 2 150. 7 130. 7 130. 1 145. 1 145. 1 146. 1 126. 5 159. 2 571. 2 607. 5 631. 0 634. 3 635. 4 632. 2 620. 7 612. 1 566. 3 683. 3 558. 4 577. 7 870. 9 Special-trade contractors.

Plumbing and heating
Painting and decorating
Electrical work
Other special-trade contractors. 0 16, 697 16, 167 16, 658 16, 619 15, 843 15, 827 15, 888 15, 836 16, 669 16, 23 16, 696 16, 23 16, 669 16, 23 16, 669 16, 23 16, 669 16, 23 16, 669 16, 23 16, 669 16, 23 16, 669 16, 24 16, 669 16, 684 16, 740 16, 845 16, 265 9, 365 6, 870 16, 101 15, 970 Manufacturing

Durable goods !

Nondurable goods ! 9, 273 9, 166 6, 828 6, 804 153. 2 242.6 Ordnance and accessories..... 188.6 186.7 158.2 159.2 161.2 162.5 165.3 170.0 178.6 188.4 202.1 163. 4 178.7 . 421. 2 1, 480. 5 1, 527. 9 1, 560. 2 1, 685. 8 1, 682. 0 1, 585. 3 1, 511. 3 1, 457. 8 1, 434. 9 1, 431. 1 1, 585. 0 1, 324. 9 333. 4 331. 8 331. 4 359. 7 321. 2 316. 6 317. 4 330. 0 310. 6 316. 7 321. 5 111. 4 113. 0 115. 1 117. 2 121. 7 127. 3 130. 6 130. 0 124. 2 118. 7 115. 3 118. 7 156. 4 172. 4 199. 6 292. 2 292. 6 336. 5 255. 2 198. 7 172. 6 136. 2 153. 6 238. 3 116. 4 117. 2 118. 2 120. 7 123. 4 123. 4 124. 2 125. 1 119. 7 112. 5 116. 2 123. 6 125. 2 125. 1 119. 7 112. 5 116. 2 119. 4 227. 6 283. 3 285. 3 Food and kindred products.

Meat products.
Dairy products.
Canning and preserving.
Grain-mill products.
Bakery products. 1, 405. 316. 7 112. 7 146. 9 115. 7 280. 2 27. 6 78. 7 189. 9 131. 3 277. 6 123. 6 264. 1 83. 4 86. 2 216. 6 138. 7 Sugar. Confectionery and related products... M iscellaneous food products..... 96, 9 32, 2 30, 6 7, 5 17, 6 99. 5 32. 4 35. 5 7. 5 24. 1 109. 4 32. 9 40. 8 7. 7 28. 5 111.5 83.0 40.9 7.7 29.9 121, 2 32, 9 40, 7 7, 7 39, 9 119. 5 32. 4 40. 7 7. 7 38. 7 110. 4 31. 9 39. 9 7. 7 30. 9 89. 8 31. 4 39. 5 7. 9 11. 0 89. 9 31. 6 39. 2 8. 0 11. 1 103.6 81.4 40.6 8.0 23.7 91. 2 31. 7 38. 0 7. 7 13. 8 105. 6 36. 4 41. 1 8. 5 25. 5 90.6 Tobacco manufactures..... Cigarettes.... Cigars

Tobacco and snuff

Tobacco stemming and redrying. 1, 674. 9 6. 3 123. 5 451. 4 28. 8 222. 4 86. 2 50. 2 14. 6 61. 5 1, 085, 0 5, 0 125, 4 483, 0 29, 4 225, 8 89, 4 80, 7 14, 0 63, 2 1, 088. 4 1, 079. 8 5. 6 5. 4 126. 9 126. 1 490. 4 487. 9 212. 9 190. 6 90. 1 50. 7 80. 3 13. 4 13. 5 64. 2 63. 5 1, 081. 6 8. 2 124. 3 481. 9 29. 1 225. 5 88. 2 51. 2 13. 9 62. 3 Textile-mill products
Scouring and combing plants
Years and thread mills
Broad-woven tabric mills
Narrow fabrics and smallwares
Knitting mills
Dyeing and finishing textiles
Carpets, rugs, other floor coverings
Hats (except cloth and millinery)
Miscellaneous textile goods 073. 8 5. 4 124. 8 484. 9 29. 4 212. 6 86. 9 52. 9 13. 9 63. 0 ,080, 2 5, 8 123, 8 481, 7 29, 0 225, 3 87, 4 51, 2 14, 6 61, 4 1,002.4 045. 9 6, 2 120, 1 471. 0 28. 4 212. 8 85. 2 49. 3 14. 3 86. 6 ,073. 8 5. 4 124. 0 485. 5 29. 1 217. 8 88. 7 50. 1 14. 4 61. 8 5. 4 125. 4 486. 1 29. 7 221. 1 90. 3 50. 1 14. 2 63. 9 Apparel and other finished textile prod-Apparel and other finished textile products.

Men's and boys' suits and coats.

Men's and boys' furnishings and work clothing.

Women's outerwear.

Women's, children's undergarments.

Millinery.

Children's outerwear.

Fur goods.

Miscellaneous apparel and accessories.

Other fabricated textile products. 1, 229. 7 1, 218. 3 1, 190. 4 126. 0 124. 1 1, 180. 2 1, 176. 7 1, 170. 1 1. 117. 0 122. 6 127. 6 175. 5 110. 4 293, 5 376, 4 110, 8 22, 0 75, 9 10, 3 57, 8 119, 6 301. 9 384. 3 113. 3 24. 8 78. 8 8. 5 80. 5 121. 2 291. 8 356. 9 106. 8 20. 4 76. 1 11. 7 69. 6 121. 8 283. 6 224. 1 100. 9 18. 0 69. 8 10. 9 85. 9 119. 9 See footnotes at end of table.

TABLE A-2: Employees in nonagricultural establishments, by industry division and group '-Continued

				(II)	n thous	inds)									
Industry group and industry		1955						1	1964						al aver
	Mar.	Feb.	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	1953	1962
Manufacturing — Continued Lumber and wood products (except furniture). Logring camps and contractors. 8s wmills and planing mills. Millwork, plywood, and prehirlested structural wood products. Wooder containers.	749. 2	736. 4 104. 3 380. 0	722. 1 96. 2 384. 4	755. 4 114. 9 395. 9	130. 2	130.7	765.0 112.6 406.3		671. 6 92. 2 302. 6		747. 1 116. 1 300. 6		710.0 96.7 978.9	102.1	430
Wooden containers Miscellaneous wood products	*******	58. 4 54. 0	58. 6	88.7	58. 4 53. 2	76. 5 53. 2	58.7	56. 6 81. 3	57. 4 52. 1	128.0 61.2 53.4	60 6 83. 7	61.1	61.0	130.6 65.6 58.6	128. 64. 60.
Furniture and fixtures. Household furniture. Office, public-building, and professional furniture. Partitions, shalving, lockers, and	352. 5	350. 0 248. 8	344. 5	348.6 248.1	353.0 251.4		349. 6 248. 0	341, 5	226. 2 226. 7	228. 3	330. d 230. 7	337. 0 236. 8	344. 4 242. 1	373.6 265.9	361.4 287.1
Partitions, shelving, lockers, and	******	41.8	41.7	41. 5	41.5	41. 8	42.1	41.9	30.0	40.3	-	40.0	277	42.7	41.1
fixtures Screens, blinds, and missellaneous furniture and fixtures	******	33.0	32.5	32.5			33.4	32.9	31.2	23. 3	83. 0		34.1	35.7	34.0
		26.4	26. 2	26. 5	26.6	26. 4	26.1	26. 2	26.4	27. 1	27. 6	26. 9	27. 6	29.2	28.4
Paper and allied products Pulp, paper, and paperboard mills Paperboard enviainers and boase. Other paper and allied products.	N27.2	525. 8 258. 2 143. 2 124. 4	536. 5 258. 5 144. 3 123. 7	531. 1 259. 8 147. 7 123. 9	592, 6 258, 7 149, 9 124, 2	531, 9 258, 4 149, 7 123, 7	882, 2 260, 3 146, 6 123, 3	837. 0 259. 2 145. 1 123. 6	140.3	525, 8 259, 2 142, 5 124, 1	822. 7 256. 9 142. 1 123. 7		825, 1 257, 7 143, 6 123, 8	829. 6 257. 8 148. 2 123. 9	808. 1 252. 6 132. 6 118. 6
Printing, publishing, and ailled industries. New synpers. Periodicals. Books Commercial printing. Lithographing. Oresting cards. Bookbinding and related industries. Misseshaneous publishing and printing	******	808. 3 294. 6 62. 2 80. 7 209. 5 59. 4 19. 3 42. 4 70. 2	808. 0 294. 1 63. 0 50. 5 210. 3 58. 6 19. 4 42. 5	817. 9 297. 8 64. 0 81. 2 211. 3 60. 8 21. 0 43. 0	816.6 297.0 64.2 51.6 200.2 61.0 22.1 43.3	815. 0 295. 2 62. 9 52. 2 200. 7 60. 8 21. 4 43. 8	810.8 295.1 62.1 51.9 209.5 60.1 21.0 43.9	801. 8 293. 6 60. 6 51. 3 205. 6 59. 2 20. 7 44. 2	799. 3 293. 3 60. 9 50. 9 206. 7 58. 3 20. 8 44. 0	804. 5 296. 2 61. 4 50. 7 207. 0 59. 0 20. 3 44. 0	801. 7 293. 7 61. 9 81. 1 206. 1 50. 2 10. 1 43. 9 66. 7	903. 7 292. 8 62. 9 81. 2 207. 2 80. 4 18. 8 44. 2	804. 8 292. 3 63. 6 51. 5 207. 3 58. 9 18. 8 44. 3	793. 6 289. 1 62. 3 80. 6 208. 1 87. 4 19. 8 44. 6	760. 3 284. 9 61. 6 47. 2 168. 7 54. 6 18. 6 42. 9
Chemins and allied products Industria inormale chemins Industria organic chemins b. Drugs and medicines	801. 6	786. 9 94. 8 301. 1 93. 1	785. 1 97. 3 200. 0 02. 7	785. 9 96. 9 298. 7 92. 4	786. 2 96. 6 297. 7 92. 8	786.2 96.3 295.5 92.7	782. 2 95. 8 295. 4 92. 5	773.3 95.6 295.8 92.0	771. 9 95. 2 297. 1 91. 4	775. 2 94. 6 297. 7 90. 9	781. 3 93. 6 297. 0 90. 8	791. 1 93. 4 298. 5 91. 8	798. 1 93. 6 301. 0 92. 2	805. 8 92. 4 317. 9 91. 6	770.0 86.7 283.3
Drugs and medicines Son, cleaning and polishing prepara- tions Paints, pigments, and filters Gum and wood chemicals Fertilizers Vegetable and animal oils and fats. Miscellaneous chemicals	******	82. 1 71. 9 8. 4 37. 9 39. 6 88. 0	82.2 71.8 8.4 35.5 40.9 87.3	51. 5 72. 0 8. 3 34. 5 42. 8 68. 8	81. 7 72. 0 8. 3 33. 7 44. 5 86. 9	82.0 71.8 8.3 34.8 45.2 80.6	82.3 72.3 8.3 33.7 42.2 89.7	81. 8 72. 7 7. 8 31. 5 87. 1 89. 6	51.3 72.6 8.1 30.4 36.7 89.1	81. 6 72. 6 8. 0 83. 0 87. 1 89. 5	51. 4 72. 6 8. 3 40. 3 37. 8 89. 5	51. 7 72. 8 8. 3 46. 8 39. 6 88. 6	81. 9 72. 9 8. 3 46. 5 41. 4 88. 3	81. 4 78.0 8.1 87. 2 42. 7 90. 0	80. 4 73. 1 8. 0 36. 9 44. 3
Products of petroleum and coal	*****	247. 7 200. 7 47. 0	248.3 201.6 46.7	249. 5 201. 2 48. 3	251. 3 202. 4 48. 9	251. 9 202. 9 49. 0	254. 2 204. 5 40. 7	255.8 206.0	255. 8 205. 8 50. 0	255. 4 205. 2 50. 2	257. 6 2672. 9 49. 7	2511. N 2572. 0 46. 0	251.6 202.4 49.2	206. 3 54. 1	253. 0 201. 6
Rubber products Tires and inner tubes		270. 2 117. 3 25. 8 126. 1	269. 8 116. 3 27. 4 128. 6	267. 9 115. 8 27. 6 124. 8	262. 4 111. 9 27. 5 123. 0	260. 9 114. 5 27. 0 119. 4	255. 9 113. 5 26. 1 116. 3	229 8 92 1 25 8	226.6 91.5 25.3 109.2	255. 2 112. 8 25. 0 117. 4	253 7 111 5 25 0 117 2	252.8 111.2 24.8 117.1	255.3 112.1 24.9 119.3	278.3 119.8 29.3 129.2	264.7 115.6 26.3 119.7
Leather and leather products. Leather: tanned, curried, and finished industrial mather betting and packing Boot and shoe out stock and findings. Footwar (escept rubber). Luggage Handbags and small leather goods.	387, 0	363. 6 43. 2 4. 6 17. 3 282. 8 14. 3 36. 3 15. 1	876. 7 43. 2 4. 7 16. 9 240. 7 13. 4 34. 1 13. 7	373. 5 43. 3 4. 6 16. 2 245. 8 14. 1 33. 6 15. 9	370. 5 42. 7 4. 6 15. 6 240. 5 14. 9 34. 8 17. 4	368. 2 42. 7 4. 6 14. 9 237. 6 15. 8 34. 6 18. 0	369. 4 42. 5 4. 5 14. 3 240. 9 15. 8 33. 5 17. 9	876. 9 42. 9 4. 4 15. 7 248. 4 18. 4 82. 6 17. 4	305. 8 43. 3 4. 4 15. 9 242. 9 14. 7 29. 0 16. 6	363.2 43.6 4.7 16.0 241.3 14.6 26.0 16.4	363. 5 43. 1 4. 7 14. 9 234. 4 13. 9 27. 0 15. 6	364. 0 43. 3 4. 8 16. 7 241. 7 13. 4 20. 0 15. 1	377. 8 44. 3 4. 8 16. 0 250. 6 13. 3 32. 9 14. 7	386. 1 47. 1 8. 4 17. 0 249. 9 17. 0 31. 8 18. 0	381. 2 46. 8 5. 1 17. 1 246. 2 16. 8 30. 3 19. 2
Bione, chy, and glass products. Fits glass Glass and glassware, pressed or blown. Glass products made of purchased glass. Cement, hydraulic. Biructural clay products. Pottery and reshted products. Concrete, gypsum, and plaster prod-	*****	519. 3 32. 2 88. 9 16. 9 42. 3 76. 4 85. 4	513.8 32.4 87.5 16.7 42.4 76.3 54.0	820. 2 32. 3 87. 8 16. 9 42. 5 78. 2 54. 7	822. 0 31. 7 88. 6 16. 7 42. 5 78. 7 85. 2	521. 2 30. 2 89. 1 16. 5 42. 9 78. 9 84. 5	820, 6 28, 9 89, 0 16, 2 42, 9 79, 5 54, 1	516. 5 27. 9 89 4 15. 9 42. 8 70. 3 52. 2	806. 4 28. 2 86. 6 15. 0 42. 7 79. 1 48. 4	810.0 28.1 90.6 18.3 39.4 79.2 51.6	509. 5 27. 7 91. 0 15. 5 40. 3 77. 8 52. 6	810. 9 28. 2 91. 6 15. 8 40. 9 77. 1 53. 4	611. 2 28. 3 91. 5 16. 4 41. 1 76. 1 54. 5	843. 2 31. 6 97. 8 18. 2 41. 8 79. 6 56. 1	827. 8 30. 4 93. 2 17. 1 40. 0 81. 2 87. 9
ucts	*****	160. 6 18. 3 88. 3	100. 0 17. 8 86. 7	102 1 18. 9	103.8 18.8 86.0	163. 9 19. 0 86. 2	104.8 19.1 86.1	105. 3 19. 0 84. 7	104.9 17.7 83.8	160. 2 18. 5	101. 8 18. 7	100.0 19.0	98. 2 18. 4	104.6 18.4 98.0	100.7 17.5

TABLE A-2: Employees in nonagricultural establishments, by industry division and group 1—Continued

				(I	n thous	unde)									
Industry group and industry		1955						10	54		10.00				ito ri aver-
and	Mar.	Peb.	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	1983	1989
Manufacturing—Continued Primary metal industries. Biast furnaces, steelworks, and rolling	1, 255. 7	1, 222. 6	1, 201. 0	1, 190. 6	1, 176. 8	1, 160. 4	1, 155. 6	1, 160. 6	1, 162. 3	1, 170, 5	1, 172. 6	1, 186. 8	1, 208. 9	1, 833. 1	1, 200.
mills. Iron and steel foundries Primary smelting and refining of non- ferrous metals	******	228. 4	222.6	218. 5		213. 5		215. 6		219.6	219, 1	223.0 87.7	223. 0 M. 0	249. 8	256. 6
Becondary smelting and redning of nonferrous metals. Rolling, drawing, and alloying of nen-		12.3	12.3	12.3	12.4	12.2	12.0	12.8	12.3	12.4	12.0	12.7	12.4	13.6	12.1
Rolling, drawing, and alloying of non- ferrous metals. Nonferrous foundries. Miscellaneous primary metal industries.	******	100. 5 79. 3 141. 1	107. 7 77. 9 139. 6	106. 8 78. 3 138. 5	105. 9 77. 2 135. 8	104. 4 74. 4 132. 4	99. 7 72. 7 132. 0	101. 8 69. 0 132. 6	100.8 70.7 131.8	102. 4 72. 8 135. 0	101, 8 72, 4 134, 8	102. 0 75. 1 186. 2	102.7 78.1 138.8	113. 6 91. 5 152. 3	108. 8 87. 6 142. 3
Fabricated metal products (except ord- nance, machinery, and transporta- tion equipment).	1, 065, 5	1, 080. 7	1, 043. 2	1, 050, 3	1, 050. 2	1, 034. 4	1, 026. 4	1,024.9	1,015.0	1,037.6	1, 040. 4	1, 047. 4	1, 000. 1	1, 141. 1	1, 042, 0
tion equipment). The cans and other tinware. Cuttery, handtools, and bardware. Heating apparatus (except electric) and	******	50. 6 152. 9 120. 7	50. 9 150. 3	51. 1 150. 1	51, 6	53. 5 144. 3	58. 2 141. 3	59. 1 141. 2	57. 6 138. 5	164.6	55. 3 146. 0	54. 2 147. 9	52.8 151. 2	160. 9	180.0
Heating apparatus (except electric) and plumbers supplies. Fubricated structural metal products. Metal stamping, cating, and engraving. Lighting flutures.	******	251. 6 236. 3 48. 3 87. 3	252. 6 234. 0 47. 0 57. 4	258. 5 233. 1 47. 3	263, 2 231, 5 46, 4 58, 7	267, 3 219, 8 44, 3	270.6 212.8 42.5	270. 7 213. 8 41. 9 51. 4	270. 9 213. 9 41. 5 51. 6	200.7 223.9 43.2 53.2	296. 6 230. 4 43. 8	265. 7 234. 4 44. 6 54. 6	264.7 230.2 45.8 55.5	271. 8 269. 7 50. 3 64. 4	251. 4 209. 9 46. 6
Fabricated wire products. Miscellaneous fabricated metal products	******	133.0	132.2	57. 4 131. 7	130.0	88, 1 127, 9	51. 6 125. 1	125. 9	124.6	128.1	128.2	130.0	133.0	144.1	196.6
Machinery (except electrical) Engines and turbines Agricultural machinery and tractors Construction and mining machinery	1, 537. 8	1, 521. 5 75. 3 154. 3	74. 6 148. 6	142.4	1, 485. 0 71. 0 138. 1 118. 9	1, 485. 8 73. 0 136. 1	1, 494. 4 70. 9 138. 0	1, 492. 7 71. 8 138. 0	1, 509. 9 74. 3 145. 2	1, 559. 7 75. 4 149. 9	1, 867. 7 76. 4 149. 7	1, 590. 7 77. 8 151. 2	1, 608. 0 78. 0 149. 2	1, 708. 3 88. 8 167. 3	1, 664. 4 85. 8 179. 9
Construction and mining machinery. Metalworking machinery (except metalworking machinery) (except metalworking machinery). General industrial machinery. Office and store machines and devices.	******	120. 2 263. 6 167. 6	119. 2 262. 9 166. 8	118. 7 264. 0 167. 1	118. 9 264. 2 166. 8	120. 4 264. 9 168. 0	138. 0 121. 4 268. 7	121. 8 260. 2 170. 2	122.5 273.8 171.0	123.6 280.4	149. 7 123. 7 264. 7	124.6 290.7 177.2	149. 2 124. 9 268. 7 179. 3	133. 4 368. 9	134.8 294.3
	*******	219. 3 105. 1	219. 0 104. 2	220. 2 106. 1 154. 6	221. 4 103. 9	221. 9 104. 9	224. 5 103. 7	222.3 101.9	222. 4 102. 7	226. 5 103. 5	227. 9 168. 3	230. 8 104. 8	179.3 235.1 108.7	243.7 160.3	235. 8 166. 7
machines. Miscellaneous machinery parts		258. 3	255. 3	253. 7	247. 9	261. 3	243, 2	246.3	244. 6	251. 3	251. 2	258.7	287. 6	267. 7	289. 4
Electrical generating, transmission, distribution, and industrial appa-		365. 8		365.2	1, 128. 2 360. 5	360. 2	354. 6	358. 7	387. 2	363. 7	369. 0	373. 5	379. 4	1, 226. 8 402. 8	1,084.1
Electrical appliances. Insulated wire and cable. Electrical equipment for vehicles. Electric lamps. Communication equipment. Miscellaneous electrical products.	*******	61. 4 30. 8 79. 9 28. 8 809. 6 44. 3	364. 8 60. 7 30. 6 78. 3 28. 4 510. 8 43. 7	63. 2 30. 7 78. 7 27. 9 519. 6 44. 6	64. 0 30. 3 73. 2 27. 7 826. 4 46. 1	63. 9 30. 4 66. 3 27. 4 819. 9	63. 7 29. 5 68. 7 27. 2 509. 3 46. 3	60.9 28.4 65.9 27.1 496.6 46.8	60. 1 27. 5 67. 7 27. 0 480. 1 45. 3	90.8 28.4 70.9 27.6 477.9 45.5	92.6 98.6 72.1 97.7 481.6 45.6	65.0 28.8 73.8 28.1 491.3 45.3	96, 9 28, 9 76, 1 28, 7 803, 9 45, 1	70.8 33.4 82.0 28.4 889.7 40.8	56. 8 36. 8 76. 9 25. 6 674. 2
Transportation confirment	1.852.2	1, 831. 4 854. 4	1, 808. 5 838. 6	1, 783. 2 812. 3	1, 741. 6 776. 4	1, 658. 4 691. 1	1, 895, 5 619, 8	1, 651. 7	1, 694. 9 706. 7	737.9	782.6	, 798. 4 , 770. 9	785, 3	970. 2	1, 693. 4
Automobiles Aircraft and parts Aircraft Aircraft engines and parts Aircraft engines and parts	******	792.2 506.1 157.4 14.9	791. 7 800. 2 157. 7 15. 1	791. 8 497. 7 158. 5 16. 1	788. 7 494. 2 158. 3 16. 6	788. 7 491. 6 159. 9 16. 9	797, 2 496, 4 161, 6	677. 6 793. 9 499. 8 154. 2 17 3	903. 8 498. 8 162. 8 17. 4	804.0 493.8 105.3 17.5	744.8 806.9 496.2 169.5 13.1	816.6 498.9 174.5 13.8	823, 1 497, 9 178, 2 17, 8	790. 8 470. 1 177. 8	790. 2 660. 7 428. 9 138. 8 14. 8
Aircraft engines and parts. Aircraft ropellers and parts. Other aircraft parts and equipment. Ship and boat building and repairing. Shipbuilding and repairing. Boatbuilding and repairing. Railroad equipment.	******	114.8 120.4 97.4 23.0 56.0	118.7 118.1 96.4 21.7 52.8 7.3	119. 5 118. 6 98. 6 20. 0 82. 2	119.6 115.9 97.0 18.9 80.9 9.7	120. 3 118. 1 100. 3 17. 8 49. 9 10. 6	122. 0 116. 8 90. 0 17. 8 51. 9	122.6 117.7 98.8 18.9 82.0	124. 8 125. 1 104. 4 20. 7 49. 5	126. 4 127. 8 105. 6 21. 9 87. 4 9. 5	128. 1 132. 0 100. 1 22. 9 80. 8	129. 4 132. 7 111. 8 20. 9 64. 5 8. 7	129. 5 136. 9 114. 0 22. 9 69. 9 8. 5	115.9 182.8 130.5 22.3 80.4 11.3	91. 6 182. 6 134. 2 18. 4 78. 3
Other transportation equipment Instruments and related products	306. 2	8.4	302.3	308.4	302.9	302.9	10. 8 302. 8	10. 8 299. 4	300.3	305.4	9. 0 310. 5	315. 3	321. 2	332.8	11.6
Laboratory, scientifie, and engineering instruments Mechanical measuring and controlling		48.0	47.9	47.9	47. 7	47. 2	46, 8	46. 4	48.5	49.3	81. 4	52. 5	58.7	54.9	49.4
instruments. Optical instruments and lenses. Surgical, medical, and dental instru-	******	78. 7 13. 1	78. 7 13. 2	78.6 13.2	78.3 13.3	78. 2 13. 6	77. 4 13. 7	76. 1 13. 5	76.3 13.4	74. 7 13. 7	76. 9 13. 6	77.3	78.3 14.3	80. 7 14. 9	74.0 14.1
ments. Ophthalmic goods. Photographic apparatus. Watches and clocks.	******	39, 4 25, 1 67, 3 31, 5	39. 4 24. 9 67. 1 31. 1	39, 6 24, 8 67, 4 31, 9	39, 5 24, 8 67, 3 32, 0	39. 5 24. 6 67. 5 32. 8	39, 8 24, 4 68, 2 32, 5	39. 6 24. 2 67. 4 32. 2	39, 6 34, 2 67, 4 30, 9	39. 8 25. 5 67. 6 35. 4	39. 7 25. 8 66. 8 36. 1	40, 0 26, 2 67, 6 37, 6	40, 8 26, 7 66, 2 39, 2	43.3 27.3 66.1 43.6	40.8 27.3 64.0 39.7
Miscellaneous manufacturing industries. Jewelry, gilverware, and plated ware. Musical instruments and parts. Toys and sporting goods. Pens, pencils, and other office supplies. Coctume jewelry, huttons, notions. Fabricated plantic products. Other manufacturing industries.	471. 1	464. 1 83. 7 16. 7 74. 7 28. 5 66. 7 74. 2 149. 6	452.0 58.9 16.5 69.5 28.4 65.3 72.9 146.5	464. 6 55. 5 16. 7 73. 3 29. 6 64. 9 73. 9 180. 7	451. 1 56. 6 16. 7 84. 2 30. 0 66. 9 73. 7 183. 0	484. 5 86. 7 16. 7 80. 1 20. 8 67. 5 71. 8 152. 9	476. 6 54. 7 16. 3 87. 6 29. 7 66. 0 70. 6 151. 7	463. 0 82. 0 15. 9 83. 7 29. 2 64. 4 68. 5 148. 3	446. 1 50. 3 15. 2 80. 6 28. 5 50. 9 91. 5	458. 9 51. 5 15. 2 81. 9 29. 2 62. 0 69. 8 140. 3	458. 3 51. 9 15. 8 81. 2 29. 3 50. 6 70. 1 156. 7	464. 7 52. 9 15. 9 80. 0 29. 4 60. 7 71. 5 154. 3	475. 1 54. 2 16. 3 80. 1 29. 8 63. 6 73. 6 154. 5	500. 2 53. 6 17. 2 94. 1 29. 5 67. 0 77. 2 161. 5	487, 4 49, 7 16, 1 90, 3 29, 9 61, 2 67, 8 152, 8

TABLE A-2: Employees in nonagricultural establishments, by industry division and group '-Continued

				(III	theum	mdaj									
Industry group and Industry		1985						10	54						al aver-
	Mar.	Feb	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1953	1962
Transportation and public stillities. Transportation. Interstate railroads. Class I railroads. Local railways and busines. Trucking and warehousing. Other transportation and services. Busines, except local. Air transportation (common carrier). Communication. Teisgraph. Other public utilities. Gas and electric utilities. Local utilities, oliewhere eissetfied.	740	1, 159, 8 1, 008, 7 116, 8 695, 7 650, 9 45, 8 106, 3 737 695, 9	2, 618 1, 187. 8 1, 009. 7 117. 3 688. 9 651. 3 46. 4 106. 1 735 608. 4 41. 1 881 556. 9	1, 027. 3 118. 2 713. 1 659. 7 46. 8 105. 8 736 694. 2 41. 8 883 558. 3	2, 672 1, 189, 0 1, 085, 4 118, 7 707, 8 656, 3 46, 6 104, 8 736 604, 3 41, 0 884 559, 0	2, 691 1, 206.8 1, 064.6 119.6 705.4 689.8 47.6 104.3 736 903.9 41.0 585	2, 704 1, 215.7 3, 002.8 120.6 702.0 666.3 47.0 105.0 738 000.2 564.4	2, 602 1, 224. 1 1, 070. 8 1, 070. 8 1, 070. 8 1, 070. 8 1, 070. 8 1, 070. 7 1, 070. 7	2, 702 1, 231 8 1, 077. 9 122. 0 684. 8 693. 7 48. 6 106. 4 747 705. 1	2, 703 1, 228, 6 1, 074, 7 122, 8 684, 2 667, 3 48, 2 105, 7 741 608, 8 41, 2 588 663, 3	2, 695 1, 215 1, 091 123 690 1 665 48 105 2 741 608	125. 4 663. 7 669. 8 48. 8 105. 3 742 669. 6	2, 670 1, 215. 2 1, 058. 8 125. 7 685. 4 643. 8 48. 5 104. 8 742 700. 0	2, 899 1, 378, 1 1, 208, 1 127, 6 734, 6 669, 5 52, 1 104, 7 47, 7 702, 2 43, 7 578, 554, 2	2, 890 1, 399, 1, 226, 133, 609, 606, 82, 97, 720 678, 40, 566 543,
Wholesale and retail trade Wholesale trade. Retail trade. General merchandise stores Food and liquor stores. Automotive and accessories dealers. Apparel and accessories stores Other retail trade.	2,806 7,601 1,297.4 1,431.8 811.6	1, 273. 7 1, 429. 0 807. 1 872. 0	2, 812 7, 646 1, 338, 9 1, 426, 2 806, 2 595, 6	2, 855 8, 545 1, 920. 8 1, 457. 6 822. 8 743. 0	2,844 7,998 1,531.1 1,437.7 808.1 630.8	2, 818 7, 766 1, 409, 8 1, 427, 7 801, 3 612, 7	2, 786 7, 694 1, 359, 6 1, 413, 2 803, 9	2, 781 7, 500 1, 299, 7 21, 405, 1 809, 8 547, 9	7, 597 1, 290, 4 1, 413, 9 812, 1 557, 3	2, 787 7, 667 1, 325. 1 1, 421. 6 811. 7 895. 6	2, 746 7, 629 1, 339, 3 1, 416, 3 906, 6	2, 762 7, 734 1, 408. 6 1, 419. 6 807. 7 659. 0	1, 318. 8 1, 398. 5 811. 8 574. 1	2, 782 7, 781 1, 447. 2 1, 387. 8 812. 8 602. 0	2, 743 7, 537 1, 446. 1, 346. 767. 569.
Pleanes, insurance, and real estate	*******	2, 104 801, 8 78, 3 786, 2 713, 1	528.0 72.4 783.5	70. 8 784. 4	826. 6 70. 0 783. 1	825. 7 69. 2 782. 3	897, 2 68, 8 782, 6	894. 2 89. 2 785. 9	534. 6 68. 3			822.6 65.4 771.2	822. 8 64. 8 768. 4	2, 025 806. 3 68. 7 740. 8 712. 8	480. 65. 704.
Herrice and minesilaneous. Hotels and lodging places. Personal services: Laundries. Cleaning and dyeing plants. Motion pictures.	*******	8, 425 466, 7 324, 0 157, 6 223, 0	826. 2 160. 0		328, 3 165, 3		314.7 329.1 163.4	883. 2 392. 2 161. 6	384.1 337.9 167.4	8, 601 827, 1 337, 3 172, 3 236, 0	171. 3	5, 506 488. 0 330. 8 170. 9 233. 4	474.3 328.8 164.4	339, 2 167, 6	493. 340. 166.
Government	6, 919 2, 145 4, 774	2, 142	2, 139	2, 457	2, 165	2, 147		2, 186	2, 161	2, 164	2, 160		2, 173	2,305	4, 420 4, 188

i The Bureau of Labor Statistics series of employment in nonagricultural establishments are based upon reports submitted by cooperating firms. These reports cover all full- and part-time employees in private nonagricultural establishments who worked during, or received pay for, any part of the pay period ending nearest the 18th of the month. Because of this, persons who worked in more than I establishment during the reporting period will be counted more than none. In Federal establishments the data generally refer to persons who worked on, or received pay for, the last day of the month; in State and ional government, to persons who received pay for any part of the pay period ending on, or immediately prior to, the last day of the month. Proprietors, self-employed persons, unpaid family workers, and domestic servants are excluded. These employment series have been adjusted to first quarter 18d benchmark levels indicated by data from government seetal insurance programs. Revised data in all except the first 3 columns will be identified by asterisks the first month they are published.

These data differ in several respects from the nonagricultural employment data shown in the Monthly Report on the Labor Force (table A-1, civilian labor force), which are obtained by household interviews. This MR LF series relates to the calendar week which contains the 8th day of the menth. It includes all persons (14 years and over) with a job whether at work or not, proprietors, self-employed persons, unpaid family workers, and domestic pervants.

¹ Durable goods include: ordnance and accessories; lumber and wood products (except furniture); furniture and fixtures; stone, clay, and glass products; primary metal industries; fabricated metal products (except ordnance, machinery, and transportation equipment); machinery (except electrical); electrical machinery; transportation equipment; instruments and related products; and miscellaneous manufacturing industries.
¹ Nondurable goods include: bod and kindred products; tobacco manufactures; textile-mill products; paper and other finished textile products; paper and allied products; propuets of petroleum and coal; rubber products; and leather and leather products.
² State and local government data exclude, as nominal employees, paid volumeer firemen and elected officials of small local units.

Note.—Information on concepts, methodology, etc., is given in a technical note on Measurement of Industrial Employment, which appeared in the September 1953 Monthly Labor Review.

TABLE A-3: Production workers in mining and manufacturing industries 1

Industry group and industry		1985						11	164						nual
industry group and industry	Mar.	Feb.	Jan.	Dec.	Nev.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	1953	1983
Mining: Metal		80.2	79.9	78.3	79.4	76.1	75. 4	84.4	M. 2	85.3	84.8	84.2	87. 2	01.3	-
Iron	******	25, 1 24, 4 12, 9	25. 1 24. 2 12. 8	24.6	26. 2	27. 6 20. 7	28, 8	20.5 24.2 12.7	86. 2 30. 4 24. 3 13. 0	30. 1 24. 3 12. 8	84.8 30.9 23.4 12.8	84, 2 30, 4 23, 2 12, 8	31. 5 24. 8 13. 0	91. 3 35. 1 24. 5 14. 6	20. 22. 18.
Anthracite Bituminous-coal	******	26.9 185.3	28. 4 165. 3	28. 9 185. 7	29. 1 186. 0	29. 2 185. 3	21. 4 186. 7	21. 6 180. 2	21. 8 182. 2	21. 9 195. 1	26.0 194.9	35. 4 200. 8	38.0 217.8	49. 1 264. 8	804. d
Crude-petroleum and natural-gas pro- duction: Petroleum and natural-gas production (except contract services)		124.0	124. 9	125. 2	126.1	127.4	131, 5	135.7	136. 8	134. 2	129.0	128.7	128. 4	131. 4	129.0
Nonmetallic mining and quarrying		82.5	K3. 2		87.9	89.0	89.7		90.2	80.0	88. 6	86.6	84.6	90.8	120.1
						12,682		12, 449	12, 212	12, 490	12, 437	12,590	12, 818	12,850	
Nondurable goods !	7, 442 5, 398	7, 394 5, 360		7, 263 5, 419	7, 247	7, 133 5, 519	7, 015 5, 506	6, 983 5, 516		7, 177 8, 308		7, 306 5, 261			13, 144 7, 539 8, 604
Ordnance and accessories	204.0	104. 4	107. 5	100. 1	109.8	111.9	114.0	112.9	116.6	120, 3	125. 2	135.8	150. 4	194. 8	188, 0
Food and kindred products. Ment products. Dairy products. Canning and preserving. Grain-mill products. Bakery products. Bakery products. Bugar. Confectionery and related products. Beverages. Miscellaneous food products.	******	979. 9 250. 2 73. 4 119. 5 83. 3 168. 4 22. 5 64. 3 105. 6 92. 7	909, 6 256, 0 72, 4 128, 6 84, 0 168, 0 24, 5 66, 8 106, 8	264. 2 72. 8 144. 6 84. 9 172. 6 38. 0 70. 6 113. 7	75. 7 171. 3 85. 7 174. 8 43. 8 74. 1 117. 5	1, 166. 8 262. 2 76. 8 233. 5 88. 1 175. 1 41. 0 75. 3 118. 6 96. 2	1, 251. 6 257. 0 80. 5 332. 2 90. 9 172. 9 26. 7 71. 5 122. 1 97. 8	250. 7 85. 3 306. 3 90. 8 174. 2 26. 0 65. 0	1, 142, 3 245, 9 88, 2 225, 3 91, 7 175, 5 24, 3 58, 1 132, 5 100, 8	1, 078. 7 246. 9 88. 2 165. 4 91. 3 173. 5 23. 8 61. 2 127. 3 101. 1	1, 001, 1 238, 6 84, 0 144, 2 87, 9 171, 9 23, 8 60, 3 121, 8	1, 011. 1 241. 1 80. 2 135. 2 80. 6 174. 2 23. 0 62. 0 117. 1 97. 7	1, 009, 1 246, 0 76, 6 125, 9 84, 7 174, 4 22, 1 65, 8 115, 1 98, 8	1, 133, 5 254, 9 80, 7 204, 5 87, 3 180, 1 28, 6 70, 4 196, 9	1, 137. 3 252. 0 82. 7 197. 0 93. 2 181. 0 71. 6 199. 3
Tobacco manufactures	82.9	88.8 29.4 37.8 6.5 15.1	91. 1 29. 5 33. 7 6. 4 21. 5	38. 4 6. 5	88,9	111.6 29.7 36.7 6.6 36.6	110.3 29.4 38.7 6.7 85.8	102.0 29.2 37.9 6.7 28.2	82.9 28.8 36.1 6.6 11.4	82.4 28.7 37.9 6.7 9.1	81. 5 28. 3 37. 8 6. 7 9. 0	81. 7 28. 6 37. 2 6. 8 9. 1	84, 6 28, 7 37, 9 6, 7 10, 7	95. 1 28. 4	94.7 27.8 39.0 7.8 22.9
Textile-mill products. Reouring and combing plants. Yarn and thread mills. Bread-woven fabric mills. Narrow fabrics and smallwares. Knitting mills. Dyeing and finishing textiles. Carpets, rugs, other floor coverings. Hats (except cloth and millinery). Miscellaneous textile goods.	998.7	995, 1 8, 1 117, 6 461, 7 25, 9 196, 1 79, 3 42, 5 11, 9 85, 0	986. 5 4. 9 116. 8 459. 2 26. 0 192. 3 78. 8 42. 3 12. 0 54. 2	25. 9 200. 1 79. 3 42. 2 12. 6	454. 1 25. 6 204. 0 78. 8 42. 7 12. 4	988. 0 4. 7 115. 0 453. 1 25. 4 204. 2 77. 4 42. 9 12. 3 83. 0	986, 8 5, 3 114, 5 452, 7 25, 3 204, 4 76, 7 42, 8 13, 0 81, 8	981. 3 5. 8 114. 3 452. 0 25. 1 201. 7 76. 4 41. 7	953.0 5.7 111.0 442.1 24.8 192.0 74.8 40.6 12.6 49.4	980. 9 5. 0 114. 7 456. 8 25. 5 197. 0 75. 2 41. 1 13. 0 82. 6	968. 6 5. 1 113. 1 481. 5 25. 3 192. 2 75. 5 41. 0 12. 8 82. 4	979.0 4.9 115.3 485.2 28.7 191.6 76.6 43.8 12.2 59.7	989, 0 4, 6 115, 7 460, 1 25, 8 193, 0 77, 8 44, 3 13, 8 54, 5	1, 692.6 6.1 134.9 504.1 27.9 215.2 82.3 48.6 15.2 58.4	1, 100, 8 5, 9 130, 8 808, 6 27, 8 215, 6 80, 0 47, 2 14, 9 87, 7
Apparel and other finished textile products Men's and boys' suits and costs	1, 101. 5	1, 069, 2 113, 9	1, 061. 1 111. 6	1,065.2	1, 083. 1 104. 1	1, 649. 7 109. 9	1, 053, 1 114, 3		979. 8 106. 6	987.0 108.2	964, 9 105, 8	1, 029. 7 110. 2	1, 100. 5 120. 8	1, 102. 1	1, 074. 7
men's and only formsoning and work clothing. Women's outerwear. Millinery. Children's outerwear. Fur goods. Miscellaneous apparel and secessories. Other fabricated textile products	*******	278.1 341.4 101.2 22.2 71.4 6.3 52.8 101.9	269. 6 334. 5 98. 6 19. 6 68. 6 7. 5 51. 2 96. 9	99.9 17.6 66.7 9.3 54.6	275. 0 314. 7 102. 8 16. 1 67. 4 10. 0 56. 7 105. 7	275. 8 305, 1 101. 8 18. 0 68. 5 8. 7 56. 5 106. 4	272. 7 312. 1 90. 7 18. 7 68. 7 9. 1 88. 6 102. 2	268, 7 317, 0 96, 0 18, 2 69, 5 8, 9 54, 4 101, 6	247. 6 295. 9 89. 5 14. 2 68. 8 9. 2 50. 2 97. 8	262. 4 283. 6 95. 1 10. 9 60. 0 9. 9 80. 9 97. 0	201, 4 286, 8 97, 2 13, 1 63, 0 8, 2 49, 4 100, 5	267. 7 814. 2 98. 8 17. 9 63. 0 6. 8 50. 8	275.0 349.4 90.2 23.6 68.0 6.9 52.8 104.8	287. 3 322. 7 102. 8 19. 1 65. 8 0. 3 56. 8 117. 8	204. 2 329. 3 97. 9 20. 8 62. 8 10. 7 87. 7
Lumber and wood products (except fur- niture) Logging camps and contractors Sawmills and planing mills	680. 2	666.8 96.2 359.2	654.3 87.2 355.7	687. 4 107. 0 306. 7	713. 1 122. 8 875. 8	720. 1 123. 1 390. 8	695, 8 104, 8 377, 6	613.1 88.6 331.1	663.7 84.6 223.8	706. 7 117. 8 372. 6	678. 5 106. 3 361. 3	648. 7 89. 9 350. 8	642.6 89.6 346.8	705. 8 94. 8 387. 1	719.1 98.2 408.7
Sawmills and planing mills. Millwork, plywood, and prefabricated structural wood products	******	110. 1 53. 8 47. 5	110. 5 54. 3 46. 6	112.6 54.2 46.9	114. 4 54. 0 46. 7	114. 5 55. 0 46. 7	113.5 54.1 46.8	96. 8 52. 1 45. 0	96. 4 62. 9 46. 0	107. 4 56. 4 47. 1	105. 5 56. 1 47. 3	103.3 56.4 48.3	101. 4 56. 4 48. 4	110. 8 60. 7 83. 2	106. 4 56. 5 53. 3
Furniture and fixtures		294. 1 215. 1	289. S 211. 4	293. 9 218. 6	208. 5 219. 0	298. 5 219. 1	295, 5 215, 9	287, 6 208, 8	272. 2 196. 9	274. 5 198. 0	276. 5 198. 6	282.7 204.3	290, 0 200, 3	319.0 333.0	300.5 225.5
furniture		33.6	33.6	83.4	33.4	33. 3	33, 9	33.7	31.9	32.1	31.9	32.1	32.0	36.0	34.6
fixtures. Screens, blinds, and miscellaneous fur- niture and fixtures.		26. 2	24. 8	24.6	25. 5	25. 6	25.4	20.9	23, 1	25. 2	21. 1	28. 2	21. 8	27. 8	24.4

TABLE A-3: Production workers in mining and manufacturing industries 1—Continued

In thousands!

	_	-								_		_			
Industry group and industry		1968						19	64						erage
magary group and magary	Mar.	Feb.	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	1983	1982
Manufacturing Continued															-
Paper and ailled products	433.2	432.2	432.6 216.7	437. 5 218. 3	217.6	440.0 217.6	440.9 220.0	435. 9 218. 8	429.9 217.1	435. 6 219. 5	432.5 217.9	432.7 217.3	435. 9 218 6	441.0	420. 9 215. 7
Pulp, paper, and paper board mills		117.0	118.1		124.1	124.0	122.9	119.1	114.9		116.3	116.3	118.0		100. 9
Manufacturing—Continued Paper and allied products Pulp, paper, and paper board mills Paper board containers and boses Other paper and allied products	******	98.8		97. 6	98. 3	98. 4	122.9 98.0	98.0		98.9	96.3	99.1	99. 3	96. 0	94.3
Printing, publishing, and allied industries.	825.1	519.7		525. 2 148. 9	823.6 147.9	524. 8 145. 4	523. 3	513. 8 145. 1	512.9 145.2	518. 5 147. 9	514.7 146.6	816. 4 148. 8	516. R 145. 9	513. 3 145. 1	500.
Newspapers Periodicals	******	26. 4	25. 9		26.0	26.1	25.8	25.0	24.8	25. 5	25. 6	26.0	26.3	25. 6	143. 8
Books	*******	30. 5		31.2	31.5	31.8	31.9	31.1	30.7	30.6	30.6	30, 4	26.3 30.5	29.7	28.1
Books Commercial printing Lithographing Oresting cards	******	169.9		171.6	169. 2	160.6	170. 4	166. 7	167.3 44.6	167. 9 45. 5	166. 5	168. 0	168.1	167. 8	163. 0
Lithographing	******	13.9	43. 9 14. 0		46. 6 16. 4	46. 5 16. 0	46.0 15.8	45.3	15.2	15.0	45. 6 14. 0	46, 7 13, 8	45, 2 13, 7	15.0	
Book binding and related industries		33. 4		33.0	34.1	34.6	34.8	15. 3 36. 1	15. 2 34. 9	34.7	34.5	13. 8 34. 8	34.7	35. 1	33.9
Oreeting cards Bookbinding and related industries Miscellaneous publishing and printing		53. 8			51.9	51.8	81.3	50.2	50.2	51.4	51.3	81.9	82.4	50, 1	
										-	825.3	533.8	538.6		-
Chemicals and allied products	541. 6	509.3 66.3		528. 5 68. 5	528, 2 66, 2	528. 9 68. 2	524. 3 67. 3	515.7 67.5	512.7 67.2	817. 2 67. 4	67. 1	66, 7	66, 8	551. 4 65. 9	636.9
Industrial inorganic chemicals	******	209. 2			204. 6	202.0	200.9	201. 1	67.2 201.2	201.3	201.0	201.7	204. 3	222. 0	
Drugs and medicines	******	87.1	86.9	56.8	57. 6	57.8	87.5	86. 5	56, 0	86.0	86. 2	86. 6	87.2	56, 9	61.3
Drugs and medicines. Soap, cleaning and polishing prepara-				31. 2	91.6	31.7	90.0	31.0	31.1	31.6	81.7	32.0	32.2		
tions. Paints, pigments, and fillers. Gum and wood chemicals. Pertilizers.	******	31.6 45.3	31. 8 45. 6	45.5	31. 4 45. 5	45, 4	32.6 45.7	45. 9	45.6	45.7	45.6	46.0	45. 9	32, 1 47, 4	32.0
Our and most chemicals		7.1	7.1	7.1	7, 1	7.0	7.0	6.5	6.9	6.8	7.1	7.0	7.1	6.9	6.9
Partiliners	*******	29.0		25.6	24. 8	26. 1	25.3	23. 1	21.9	24. 5	81.7	38.4	38.1	29. 0	29. 2
Vegetable and animal offs and fats	******	27.6	28.7	30. 4 57. 1	31. 8 57. 2	32, 7 58, 0	80.4	25. 9 87. 6	25. 3 57. 5	26. 0 57. 9	26. 7 58. 2	28. 4 87. 0	30. 0 57. 0	31. 3	
Miscellaneous chemicals	******	86. 1	36.0	07.1	07. 2	. U	08. 2	07.0	01.0	01.0	-	01.0	51.0	59, 9	61.9
Products of petroleum and coal	170.7	168.7	168.6	171. 8	173.3	174. 5	177.1	179.3	181.2	181. 1	178.6	176. 2	176. 8	185. 5	182.6
Petroleum refining	******	131.4	131. 8	132.8	134.0	135.1	137. 2	139. 1	140.6	140.3	138. 4	137.0	137. 2	142.4	140. 2
Petroleum refining Coke and other petroleum and coal products		37. 3	36.8	36.7	39.3	39, 4	39.9	40.2	40.6	40.8	40.2	39. 2	39.3	44.1	42.4
		212.0	211.0	200.3	204.6	204. 2	198.9	177.0	173.1	198.4	197 0	195. 2	199, 4	220.8	211.7
Rubber products	214.0	88. 9	87.8	87.0 22.3	83.7	86. 5	85. 2	68.0 20.5	67.3	85. 6	83.9	83, 2 19, 2	84.7 19.6	93. 0	92.9
Rubber footwear	******	21. 6	22. 1	22.3	22.3	21.9	85. 2 21. 0 92. 7	20. 5	20.1	19.8	19.8	19, 2		23. 7	22.0
Rubber products Tires and inner tubes Rubber footwear Other rubber products	******	101. 5	101.1	100.0	96. 6	95. 8	92.7	88. 5	85.7	93. 6	93.3	92, 8	95.1	104. 1	96.0
		345. 2	335.6	334.0	331. 2	328.7	330.0	837. 2	327.0	323.6	815.1	325. 1	337.7	346.7	342.5
Leather and leather products Leather: tanned, curried, and finished. Industrial leather belting and packing.	******	38. 9	38.8	39.0	38. 4	38.4	38.1	39. 5	38.9	39. 1	38. 6	38. 8	39. 8	42.4	41. 9
Industrial leather beiting and packing .	******	3.6	3.6	8.5	3.5	3.5	3.5	3.4	3.4	3.6	13.2	3.6	3.7	4.4	4.3
Hoot and shoe cut stock and findings	******	15.6 229.6	15. 1 224. 9	14. 4 221. 5	13.9	13, 2 213, 1	12.6 216.6	14.0	218.1	14. 2 216. 7	210. 8	217.8	225.8	15. 1 225. 8	15.3
Footwear (except rubber)	******	12.1	11.2	11.9	12.7	13.6	13.6	223. 8 13. 2 29. 2	12.5	12.4	11.8	11.3 26.7 12.9	11, 1	14. 8	14.7
Handbags and small leather goods	*******	32.5		30.0	31. 4	31.3	30.1	29. 2	25. 7	23. 3	23. 7	26.7	29. 6	28. 5	27.0
Oloves and miscellaneous leather goods.	******	12.9	11. 5	13.7	18. 1	15.6	15. 5	18.1	14.3	14.3	13. 4	12. 9	12.6	15.6	16.7
Stone, clay, and glass products	441.1	435.5	430.4	435.9	435.8	437.9	437.2	433.8	423.8	427.2	426.9	428.3	429.1	460. 2	447.7
Flat glass Glass and glassware, pressed or blown. Glass products made of purchased glass. Correct, hydraulic	******	29.0	29. 2	26.9	28. 6	27.1	25. 7	24. 7	25.0	24. 9	34.7	25.0	25.3	28. 2	26. 9
Glass and glassware, pressed or blown	******	75.6	74. 1 14. 5	74.7	78. 5 14. 5	75. 9 14. 2	75. 7 13. 9	76. 2 13. 7	73.6	77. 6 13. 2	77. 9 13. 3	78. 4 13. 7	78. 2	84. 8 15. 8	90.4
Cement, hydraulic	******	35. 4	35. 5	85.6	35. 7	36.0	26, 1	36.0	35. 9	32.7	33.7	34.2	34. 5 67. 7	85. 2	33.9
Structural clay products	******	68.0	68.0	69.7	70.2	70.3	70.6	70. 5	35. 9 70. 3 42. 7	70. 8	69. 2	68. 5	67.7	71. 2	73. 6
Pottery and related products	*****	49. 1 81. 7	47.9 81.0	48. 6 83. 3	49.0	49.3 85.0	48.0	86.4	42.7 86.0	45. 6 84. 2	46. 4 83. 3	47. 1 81. 4	48.2	49, R	81.7
Concrete, gypsum, and plaster products	******	15. 9	15.6	16.6	49. 0 84. 8 16. 5	16, 7	16.8	16.8	16.5	16. 2	16.3	16.8	16.2	95, 0 16, 2	15.8
Concrete, gypsum, and plaster products Cut stone and stone products Miscellaneous nonmetallic mineral	*******	200							-						
products	******	66.2	64.6	64.9	64, 0	64. 4	64. 5	63. 1	61.9	62. 3	62.1	63. 2	65. 2	72.9	08. 5
	1,064.3	1,004.2	1, 011. 9	1,001.8	987. 7	909.1	965. 3	967. 8	960.0	983. 0	975. 6	991, 1	, 009, 6	1, 131. 5	1, 043. 7
Binst furnaces, steelworks, and rolling mills	******	809. 9	497.8	493.0	486.7	481. 2	485.0	483.5	485.4	488. 1	453.3	490.8	802.0	550. 6	485. 8
	******	200.0	194. 2	190. 2	186. 9	184, 5	184.0	196.8	186.4	191.0	190. 4	194. 2	195, 0	219. 9	236.7
Primary smelting and retining of non-		48.5	48.3	48.3	48.0	45, 2	45.5	48.1	48.0	47.6	47.1	47.1	47.6	49.3	46.1
ferrous metals Secondary smelting and refining of non-	******	40. 0	40.0	40.0	40.0		40.0	-	30.0	-		****	41.0	10.0	***
ferrous metals	******	9.3	9.2	9.2	9.2	9.0	8.8	9.1	9.1	9.2	9.3	9.3	9.1	10.0	9.8
Rolling, drawing, and alloying of non-		87.3	86, 1	85.3	84.5	83. 2	78.4	80.7	79.6	81.0	80. 6	80.9	81.4	92.2	86.2
Nonferrous foundries	******	65. 5	64. 2	64. 5	63. 5	60.6	58.6	54. 5	86.1	58. 2	57. 6	60.0	63. 3	76.4	73.0
Miscellaneous primary metal industries	******	113.7	112.1	111.3	108.9	105. 4	105.0	105. 1	104.4	107. 9	107. 3	108.8	111.2	124. 3	110.7
Pahricated metal products (except ord-															
Fabricated metal products (except ord- nance, machinery, and transporta-		040.0			***	***	-10		000			839 A	852.1	992.1	
tion equipment)	855.3	843.9	835. 9	843.7	844.8	829, 2 46, 8	819.9	819.1	809. 2 50. 7	50. 2	833. 3	47. 5	46.1	48.6	847. 8
Tin cans and other tinware	*******	125. 7	123.0	122.7	120.1	116.7	113.9	113.8	111.4	117.3	119.3	120.3	123. 4	132. 9	48.7 123.3
Heating apparatus (except electric) and												-		100	
Heating apparatus (except electric) and plumbers' supplies Fabricated structural metal products. Metal stamping, coating, and engraving Lighting fixtures Fabricated wire products	*****	94. 9	92.3	94.9	98. 2	97.9	97.7	95.3	90.1	92.0	80.6	89. 2	91.3	107.8	106, 0
Pabricated structural metal products	******	196.5	187.6	193.3	198.7	202. 8 182. 2	205, 4 175, 2	205. 6 175. 9	206. 8 175. 9	205. 7 185. 2	202. 8 191. 1	201. 7 195. 3	201. 0 200. 2	206. 4 219. 0	194. 1 175. 2
Lighting figures		39, 1	37.9	38.1	87. 1	35, 2	33, 4	82. 9	32. 6	34. 2	34. 3	35. 5	36, 6	41. 2	37. 2
		47. 7	47.8	46.0	46.3	43. 0	42.2	42.1	42.0	43. 5	44.3	45.0	45.8	54. 3	49.9
Fabricated wire products Miscellaneous fabricated metal products		108. 1	107. 4	107. 2	105.9	108.7	100.8	101. 3	99. 7	100.0	103. 1	105.0	107.7	19.1	113.1

TABLE A-3: Production workers in mining and manufacturing industries '--Continued

Industry group and industry		1985						19	64						nual rage
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	1953	1953
Manufacturing—Continued															
Machinery (except electrical)	1, 142. 2	1, 126. 2	1, 109. 5	1, 105. 5	1,001.3	1,091.3	1, 695. 1	1,092.5	1, 108. 4	1, 150. 6	1, 165.0	1, 186. 6	1, 201. 9	1, 301. 8	1, 279.
Engines and turbines		53.6	63. 1	82.7	49.7	51.6					54.2	54.6	88.8	64.7	63.
Engines and turbines Agricultural machinery and tractors		115.0							105.0		110.1	111.6	109.7	125. 6	137.
Construction and mining machinery		86.0	85, 3						98. 5		89.6	90.4	90.7	99. 2	100.
Metalworking machinery Special-industry machinery (except			199. 5		201. 6	262.2		-	209. 7		219. 8	224. 9	232. 2	244.8	285.
metalworking machinery)	******	119.0	117.9	118.7	118.5	119. 2			121.0		125. 8	127.8	129.7	138.0	142.
General industrial machinery	*****	147.9	147.1	147.8	149.0	149.3					155. 7	158. 2	162. 2	171.8	167.
Office and store machines and devices	******	83.1	82.3	83. 2	82. 1	83. 0	82.1	80.4	80. 6	81.7	81. 3	82.8	83.6	86.5	MU.
Service-industry and household ma-						***									
Miscelinneous machinery parts	******	120.0 201.4	115, 9 198, 7	116.3	114.4	113, 7 188, 4	114.1	111.1	112.9		133. 4	138.0	135.6 202.4	214.2	140. 201.
M Beethneeds machinery para	******	201. 4	190.7	101. 4	191. 0	100. 1	100.7	190.0	100.9	199.2	190. 9	190. 0	ana. •	214.2	201.
Electrical machinery	827.0	821.3	817.8	827.1	826. 3	817.3	802.0	781. 9	765. 4	775.8	791. 2	810. 9	827.4	930. 4	817.
Electrical generating, transmission,				***			****					-			
distribution, and industrial apparatus.			255, 0 48, 0	255, 9 50, 5	250, 8 51, 5	250. 6 51. 7		244. 4	245.1 47.8	253.0	259. 2	263. 2 82. 9	208. 5 54. 6	290.7	269.
Riectrical appltances	*****	48.7	24.7	24. 9	24.6	24.6			21.9	48.3 22.7	23 1	23. 2	23.4	M. 0	46.
Insulated wire and cable Electrical equipment for vehicles	*****	65.3			88.7	51.7			53.3	56.6		58.9	60.5	27. 7 67. 6	60.
Electrical equipment for venicles	******	24. 7	24. 7		23.9	23. 7	23.5		23.4		24.2	24.5	25.0	24.9	22
Communication equipment	******	370.1	309.7	377.9	384. 5	380.8		357.0	340.4		342.6	354.3	361.9	422.6	356
Miscelianeous electrical products	******				34.3	34. 2			33.8	33. 8	34.0	33.9	33. 6	38.1	36.
Transportation equipment	1 400 0	. 400 7	1 307 7				. 104 1	1, 236.6		1 994 1				1, 543.6	1. 334.
Automobiles	1, 420. 8	708.1	692.0		632.7	548. 7		533. 5					637.0		
Aircraft and parts		548.1	549.9		549.3	850.7		855.8	564.9		675.0	584. 5	591.9	576.8	453.
Aircraft					342.0	341. 2			349.2		353.3	356.2	355 5	347. 8	311.
Aircraft engines and parts	******				105.9	107.6					116.2	121.3	128.5	126.6	98.
Aircraft propellers and parts	******	10. 4	10.5		11.7	11.9	12.1	12.3	12.5		9.1	9.3	12.6	13.2	10.
Aircraft propellers and parts Other aircraft parts and equipment	*******	85.8	89. 2	89.8	89. 7	90.0			93 8	95.4	96.4	97.7	66.3	89.3	63.
Ship and boat building and repairing	******	104. 4	101.7	102.4	99. 5	102.1	100.7	101. 8	108.8	111. 1	115.2	115.6	119.5	134. 4	134.
Shipbuilding and repairing	******	84. 2	82.7	85. 1	83. 4	86.9	85. 5	85.3	90.7		95.0	97.3	99.1	114.5	118.
Boatbuilding and repairing		20. 2	19.0	17.3	16.1	15. 2	15. 2	16. 2	18.1	19.3	20. 2	18. 4	29.4	19.8	16.
Ratiroad equipment		41.4	38. 4	37.7	35.4	35. 5	37. 2		34. 2		44.1	48.3	83.4	62. 9	61.
Ratirond equipment Other transportation equipment	******	6.7	5.7	6.6	8.0	8.8	9. 0	8.8	8.1	7.8	7.3	7.0	6. 8	9.6	9.
Instruments and related products	215. 1	212.2	212.1	213. 3	213. 2	213. 2	213.6	209.7	210.0	214.8	219. 8	223. 9	229.4	242.3	227.
Instruments		28.7	28. 9	28.8	28.7	28.1	27.8	27.1	28.4	29.1	30. 8	31.7	32.6	34.4	32.
Mechanical measuring and controlling															
instruments		55.8	56.1	55. 9	88. 6	55. 3	54.9	53.4	58. 4	81.6	84.0	54. 4	88. 4	58.1	53 (
Optical instruments and lenses	******	10.1	10. 2	10. 2	10.3	10, 6	10.8	10.7	10.6	10.8	10.8	11.0	11, 1	11.7	11.3
Surgicul, medical, and dental instru-			-						-					-	
ments	*******	27. 2	27.2	27.3	27. 1	27. 2	27.8	27.3	27.4	27.7	27.7	28.0	28.5	31.0	29.1
Ophthalmie goods		19.8	19.7	19. 5	19.6	19.5	19.3	19.1	18 9	20.2	20.5	20.8	21. 3	22.0	22.0
Photographic apparatus		44. 7 25. 9	44. 6 25. 4	45. 5 26. 1	45. 6 26. 3	45. 9 26. 6	46. 5 26. 8	45, 5 26, 6	45.7 25.6	45.9	45. 7 30. 3	46.3	47. 0 33. 2	47. 5 37. 5	23.
									-	-		-			
Miscellaneous manufacturing industries			365, 8	378. 9	305. 3	398, 2	391. 5		302.5	375.0	373.9	380, 1	200.0	414.8	378.1
Jewelry, silverware, and plated ware		43.3	43.7	45.1	46. 3	46.0	44.7	41. 9 13. 5	12.8	41.6	41.9	42.6	13 8	43.8	40.
Musical instruments and parts	******	14. 2 61. 4	14. 1 56. 2	14.3	70.8	14.3 75.2	13. 9 73. 8	70. 2	67. 2	12.9	13. 2 67. 9	13. 5 67. 0	66.8	14.9 81.0	13
Toys and sporting goods Pens, pencils, and other office supplies.	******	21.1	20. 9	22. 1	22. 6	22.4	22.4	21. 9	21.3	22 0	22.1	22.1	22.5	81. 0 22. 3	22.
Costume jewelry, buttons, notions	******	55.9	54.7	54. 4	56.1	86.7	55. 6	54.0	49.6	51. 7	49.1	80. 5	52.3	M5. 2	50
Fabricated plastic products		60.4	89. 2	60.1	60.0	58.7	57. 3	85.4	53. 9	56.9	57.3	58.8	60.6	64.6	86
Other manufacturing industries	0000000	120.7		122.8	125. 2		123. 8	120.7	117.3		122.4	125.6	129.0	132.0	124.5

¹ See footnote I, table A-2. Production and related workers include working foremen and all nonsupervisory workers (including leadmen and trainess) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, junitorial, watehman services, products development, auxiliary production for plant's own

use (e. g., powerplant), and recordkeeping and other services closely associated with the above production operations, $^{\circ}$ See footnote 2, table A. 2. $^{\circ}$ See footnote 3, table A. 2.

See Norz on p. 588.

Table A-4: Indexes of production-worker employment and weekly payrolls in manufacturing industries ¹

[1947-49-100

Period	Employ- ment	Weekly payroll	Period	Employ- ment	Weekly payroll	Period	Employ- ment	Weekly payroll
1909: Average. 1940: Average. 1941: Average. 1942: Average. 1942: Average. 1943: Average. 1944: Average. 1944: Average. 1946: Average. 1947: Average. 1947: Average. 1948: Average.	60. 2 71. 2 87. 9 103. 9 121. 4 118. 1 104. 0 97. 9 108. 4 162. 8	29. 9 34. 0 49. 3 72. 2 99. 0 302. 8 87. 8 81. 2 97. 7 105. 1	1940: Average	98. 8 99. 6 106. 4 106. 3 112. 0 101. 6 101. 8 100. 5 100. 9	97. 2 111. 7 129. 8 136. 6 131. 6 138. 4 138. 0 136. 6	1964: July August Beptember October November Desember 1955: January February March	98. 7 100. 6 102. 0 102. 3 102. 7 102. 5 101. 5 102. 5	132: 135, 138, 139, 142: 142: 141.

[!] See footnote 1, tables A-2 and A-3.
See Nors on p. 888.

TABLE A-5: Federal civilian employment by branch and agency group

[In thoumnds]

				Елеси	itive 1			
	Year and month	All branches	Total	Department of Defense	Post Office Department	Other agencies	Legislative	Judietal
				Conth	nental United S	tates 1		
1982: 1953:	A verage	2, 420 2, 305	2, 394. 0 2, 279. 0	1, 196. 2 1, 130. 6	538. 3 526. 5	606. 6 621. 9	22. 6 22. 2	3,1
1964:	February March April April May June July August September October November December	2, 178 2, 173 2, 168 2, 169 2, 164 2, 161 2, 156 2, 141 2, 147 2, 165 2, 457	2, 149, 0 2, 147, 2 2, 141, 2 2, 134, 2 2, 138, 1 2, 136, 1 2, 130, 1 2, 115, 1 2, 120, 8 2, 138, 8 2, 431, 1	1, 048. 4 1, 941. 4 1, 936. 0 1, 628. 6 1, 925. 2 1, 925. 2 1, 925. 6 1, 012. 6 1, 012. 6 1, 011. 1 1, 011. 7 1, 011. 9	502. 2 500. 8 502. 6 502. 6 504. 8 507. 7 503. 3 501. 8 509. 2 809. 4	598. 4 605. 0 603. 3 603. 2 606. 1 506. 2 803. 8 559. 2 607. 6 620. 9 610. 8	21. 9 21. 8 21. 8 21. 8 21. 9 22. 0 22. 0 22. 0 22. 1 22. 1	2. 6 2. 6 4. 6 4. 6 4. 6 4. 6 4. 6
1955:	January	2, 139 2, 142	2, 113, 2 2, 116, 4	1, 014. 6 1, 016. 8	504. 8 503. 7	593, 9 595, 9	21. 7 21. 8	4.6
				W	shington, D. C	,		
1983: 1983:	A verage	258. 7 241. 4	237. 2 220. 8	92. 9 90. 4	10.0 9.5	184. 4 120. 4	20. 8 20. 3	:7
	February March April May June July August September October November December	229. 1 228. 0 227. 8 228. 6 228. 7 227. 1 226. 1 224. 5 225. 3 225. 8 230. 7	207. 2 207. 2 207. 0 208. 8 207. 8 206. 2 205. 2 208. 6 204. 4 205. 9 206. 9	87. 4 87. 3 87. 1 86. 4 87. 2 87. 2 87. 0 86. 5 96, 8 67. 0	9.0 9.1 9.2 9.0 8.9 8.8 8.7 8.7	110. 8 110. 8 110. 7 110. 4 111. 7 110. 4 108. 4 108. 9 110. 2	20. 1 20. 0 20. 0 20. 0 20. 1 20. 2 20. 2 20. 2 20. 2 20. 2 20. 2 20. 1	.8 .8 .8 .7 .7 .7 .7
1986: .	January	226. 8 227. 6	206. 2 207. 0	87. 4 87. 7	8. 8 8. 8	110. 0 110. 5	19.9 19.9	:7

¹ Includes all executive agencies (except Central Intelligence Agency) and Gevernment corporations. Civilian employment in navy yards, arsenais, bospitals, and on force-account construction is also included.

¹ Includes the 48 States and the District of Columbia.

Includes all Federal civilian employment in Washington standard metropolitan area (District of Columbia and adjacent Maryland and Virginia scounties).
See NOTE on p. 888.

Note.—Beginning with July 1954, approximately 1,200 Howard University and Gallaudet College employees located in the District of Columbia are excluded from Federal Government figures and are included in Service Division. In addition, beginning with November 1954, approximately 700 employees formerly classified as District of Columbia government employees are included in Federal civilian employment, and 400 Federal employees formerly classified outside the Washington Metropolitan area are now in the area.

TABLE A-8: Insured unemployment under State unemployment insurance programs, by geographic division and State
[In thousands]

	16	155						1954						1953
Geographic division and State	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Feb.
Continental United States	1, 879. 8	1,962.3	1, 666. 2	1, 463. 3	1, 465. 8	1, 580.4	1, 691. 7	1, 861. 9	1, 924. 0	2, 070. 4	2, 181. 6	2, 174. 8	2, 160. 3	1, 083, 6
New England	140. 4	150. 4	128. 9	116.1	117. 5	128.9	130.6	143.5	147.7	168.3	172.8	160, 9	161. 2	81.4
Maine	12.8 7.5	14.0 8.2	12.4	11.0	8.2 9.8 3.1	8.3 10.8	9.2	9.9 9.8 2.9	11.1	16.6	18.1	13.7	16.4	8.6
New Hampshire Vermont		5.0	4.0	8.2	3.1	2.9	9.2	2.9	8.6	4.3	8.8	3.4	3.6	1.1
Massachusette	70.1	75. 2	64. 5	56.9	86.7	60.8	58.5	64.7		78.2 26.7	78.4	76.1	78.3	42.1
Rhode Island	16.8	17. 2 30. 8	13.6	12.0 24.6	13.5	19.0 27.1	18.7 32.1	21. 2 35. 3	31.7	20.7	28.3	30.0	27.3	13, 4
		M7.0	801. 8	445.4	445.8	459.1	494.5	878.9	609.7	628.2	622.0	RRQ. 4	878. 6	310.0
Middle Atlantic		266, 3	230. 2	194.1	184. 5	184. 5	196.2	254.7	279. 3	275.8	277.3	261. 7	264. 5	165. 5
New Jersey	91.7	94.6	78.7	71.8	70.8	60.7	76.3	96.6	89.1	94.9	91.9	87. 9	89.0	45.1
New Jersey Pennsylvania	213. 8	226. 1	192.6	180.0	190. 8	204. 9	222.0	234.6	261.3	252. 8	262.8	230. 8	222.1	100, 3
East North Central		365.8	329.8	311.4	300.9	424.1	428.9	431.9	426.4	485.7	486.7	480.4	472.9	138,3
Ohio	89. 0 36. 7	96. 2 41. 8	87. 2 36. 0	77. 7 32. 6	79. 2	87. 2 40. 9	91.7	98.0	97. 3 51. 0	105.3	113.5	67.0	100.3	30, 6 15, 2
Indiana		116.4	101.6	95. 0	101.9	113.0	133. 9	148.1	161. 4	165.0	153.3	124. 5	120.9	80.9
Michigan	69.0	75.8	72.1	80.3	121.6	159.1	131.0	115.6	89. 2	108.9	118.9	129.9	127. 8	27.0
Wisconsin	33.0	35.6	32.9	25.8	23. 6	23. 9	22. 1	24.8	27. 8	31.7	36.9	42.8	42.5	14.6
West North Central	137.7	128.8	96.4	78.2	70.8	69.1	71.9	77.8	84.3	103.0	123.1	130.3	127.8	74.3
Minnesota	43.4 14.0	12.5	29.6	20.2	16.0	15. 4	18.0	20.0 7.3	8.1	9.6	12.1	15.6	35. 8 17. 1	25. 8
Missouri	44.4	45.0	39.7	39. 4	39. 5	5.3 38.6	36.5	38.9	41. 2	46.6	47.6	43.2	42.0	20. 2
North Dakota	6.7	5.9	3.7	1. 5	.4	.3	.3	.4	.6	1.3	8.6	8.1	8.4	4.4
		3.1	1.8	.8	.4	.4	. 8	. 5	. 6	. 9	1.0	3.0 7.7	3.3	2.2
Nebraska. Kansa	0.0	8.0	10.5	2.6 8.0	7.2	7.1	2.6 7.8	7.6	7.9	9.2	11.9	14.6	15.8	7. 2
	201.0	1	177.0							31.0				
South Atlantie	184.1	198.1	168.2	147. 4	154.4	176.0 3.0	205. 2 3. 4	3.6	237.7	241.6	237. 9 4. 0	4.5	221. 5	105.6
Delaware Maryland	25.1	27.0	23. 1	20.1	20.5	24.5	28.6	31.8	32.3	33.6	32.0	20.6	27. 8	12.1
District of Columbia	7.5	6.6	8.0	4.4	4.2	4.3	4.9	5.1	8.2	5.6	6.6	7. 6	7. 8	3.6
Virginia	17.9	18.0	14.3 28.9	12.0	12.9	15.4	20.1	26. 8	30. 8 43. 3	23.8 45.6	21.6	23.0	22.4 36.3	9.4
West Virginia North Carolina	29. 8 43. 3	32.8 44.4	36.2	27. 4	29. 4	33. 2 32. 1	36.7 38.3	40.1 81.5	52.3	88.8	47. 2 59. 1	41. 4 54. 5	54.1	17.3 27.0
South Carolina	15.1	16.8	15.5	14.4	14.1	14.9	17.1	19.7	18.9	20.7	21.0	20.8	21. 1	10. 6
Georgia	26.5	31.9	27.0	22.0	22.1	24.8	30.1	34.0	34.2	33. 8	32.8	31. 9	33.7	14.8
Plorida	14.5	16.3	14.9	14. 9	19.7	23.8	26.0	24.4	18. 2	15. 4	13.6	14.4	14.8	9. 2
East South Central	128.2	134. 4	118.3	108.1	105. 1	110.3	127.7	141.9	150. 5	156. 9	159.8	154. 4	151. 8	78.0
Kentucky	41. 2 46. 4	39. 3 49. 8	36. 3 43. 3	34. 4	34. 9 37. 4	37. 2 37. 7	42. 9 42. 1	46.6	49. 2 82. 1	54.9	52. 8 87. 0	49.7 54.9	46.3 86.3	19.6 26.0
Tennessee	23, 4	26.6	23. 9	23. 1	22.6	24.6	29.0	31. 3	31.7	30.3	31,6	30.4	28.9	17.1
Alabama Mississippi	17.2	18.7	14.8	11. 5	10. 2	10.8	13.7	17. 3	17. 8	17.8	18.4	19.4	21.0	12.3
West South Central	101.0	97.6	77.6	64.4	60.0	62.1	71.8	79.0	83.8	98. 5	101.9	106.6	107. 9	61. 2
Arkansas	20.0	20.1	18.4	12.1	10.4	10.7	13.3	15.1	15. 3	18.3	20, 4	20. 5	23.1	14.5
Louisiana	27. 8 17. 3	21.4 17.8	19. 8	16.7	15. 5	16.2	19.2	22.0 12.4	22.4 13.1	23.1	24. 4 16. 2	26. 0 17. 7	21. 1 25. 0 18. 8	16, 7 12, 8
Oklahoma Teras	35. 9	34.3	28. 5	11. 5 24. 1	10. 5 23. 6	10, 9 24, 3	12. 2 27. 1	29. 5	33.0	37.2	40.9	42.3	42.0	17. 2
Mountain	82.5	48. 4	32.9	23.1	18.8	20.0	21. 5	23.7	25.7	83.3	47.4	87.7	60.0	33. 8
Montana	8.1	6. 5	3.8	2.2	2.2	2.2	1.3	1.4	2.0	3.3	8.9	7.2	8.4	6.0
Idaho	9.9	9.4	6.7	3.7	1.9	1.0	2.1	2.2	2.8	3.8	6.7	3.9	11.6	8.1
Wyoming	5.9	6.3	1.8	3.4	2.8	2.6	3.1	1.3	3.8	8.6	3.1	10.1	1.7 0.2 0.6	1.7
New Mexico	5.7	8.4	3.9	2.8	2.4	2.8	8.5	3.9	4.1	4.8	5.9	7.0	6.6	2.8
Arisona	6.3	6.1	4.6	4.2	4.3	8.1	5.1	5.2	5.5	6.9	6.7	7.0		3, 6
Utah Nevada	8.4	8.0	4.9 2.7	2.8	1.6	1.5	1.5	1.5	1.7	1.9	7.8	3.7	3.0	5.3 1.7
	240.7	251.8	210. 8	169.3	132.6	130.6	139.6	182.1	158.0	185. 2	229.9	270.6	201. 8	203. 4
Washington	51, 6	56.3	46.2	36.1	26.5	24.9	25.9	23.0	18. 2	23.7	33.9	47. 6	63.4	43. 5
Oregon California	30. 2	32.8	27.3	20.6	14. 4	13.1	14.4	15.8	11.8	15.0	22.9	32. 6	42.3	31. 2
California	156.9	162, 7	137.0	112.6	91.7	92.6	99.3	113.3	128.0	146. 6	173.1	190.5	185. 8	128.7

¹Average of weekly data adjusted for split weeks in the month. For a sechnical description of this series, see the April 1950 Monthly Labor Review (p. 382). Figures may not add to exact solumn totals because of rounding.

Source: U. S. Department of Labor, Bureau of Employment Security.

B: Labor Turnover

Table B-1: Monthly labor turnover rates (per 100 employees) in manufacturing industries, by class of

Class of turnover and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oet.	Nov.	Dec.
						Total sep	aration†					
1948 1949 1940 1940 1941 1943 1945 1945	4.3 4.6 3.1 4.1 4.0 3.8 4.3 2.9	4.7 4.1 3.0 3.8 3.9 3.6 3.5	4.8 4.8 2.9 4.1 3.7 4.1 3.7	4.7 4.8 2.8 4.6 4.1 4.3 3.8	4.3 5.2 3.1 4.8 2.9 4.4 3.3	4.5 4.3 3.0 4.3 3.9 4.2 3.1	4.4 3.8 2.9 4.4 8.0 4.3 3.1	5.1 4.0 4.2 5.3 4.6 4.8 3.5	5.4 4.2 4.9 5.1 4.9 5.2 8.9	4.8 4.1 4.3 4.7 4.2 4.8 3.8	4.1 4.0 3.8 4.3 3.5 4.2 3.0	4.1 3.1 3.1 4.0 3.0
						Qu	it					
1948	2.6 1.7 1.1 2.1 1.9 2.1 1.1	2.8 1.4 1.0 2.1 1.9 2.2 1.0	2.8 1.6 1.2 2.8 2.0 2.8 1.0	3.0 1.7 1.3 2.7 2.2 2.7 1.1	2.8 1.6 1.6 2.8 2.2 2.7 1.0	2.9 1.5 1.7 2.5 2.2 2.6 1.1	2.9 1.4 1.8 2.4 2.2 2.5 1.1	3.4 1.8 2.9 3.1 3.0 2.9 1.4	3.9 2.1 3.4 3.1 3.5 3.1 1.8	2.8 1.5 2.7 2.5 2.8 2.1 1.2	2.2 1.2 2.1 1.9 2.1 1.5 1.0	1.7 1.7 1.4 1.7 1.1
						Diseh	arge					
1948	.4 .3 .2 .3 .3 .3 .3 .2 .2		.4 .3 .2 .3 .3 .4	:	.3	.4 .3 .4 .3 .4 .3	.4 .2 .3 .3 .4 .2	.1	.4 .3 .4 .4 .4	:1:2:4:4:4:4:4:2:2	.4 .2 .3 .3 .4 .8 .2	.3 .3 .3 .3 .3
		7.4				Laye	off					100000000000000000000000000000000000000
1948	1. 2 2. 8 1. 7 1. 0 1. 4 . 9 2. 8 1. 8	1.7 2.3 1.7 .8 1.3 .8 2.2	1.2 2.8 1.4 .8 1.1 .5 2.3	1. 2 2. 8 1. 2 1. 0 1. 3 . 9	1. 1 3. 3 1. 1 1. 2 1. 1 1. 0 1. 9	1.1 2.5 .9 1.0 1.1 .9 1.7	1.0 2.1 .6 1.3 2.2 1.1 1.6	1. 2 1. 8 . 6 1. 4 1. 0 1. 3 1. 7	1.6 1.8 .7 1.3 .7 1.5 1.7	1.2 2.3 .8 1.4 .7 1.8 1.6	1.4 2.5 1.1 1.7 .7 2.3 1.6	2.2 2.0 1.3 1.8 1.0 2.8 1.7
					Miscells	neous, inc	duding m	litary				
1945	.1 .1 .7 .4 .4 .3	.1	.1 .1 .8 .3 .3 .3	.1 .1 .5 .3 .3 .3	.1 .1 .4 .3 .3 .3	.1 .1 .4 .3 .3 .2	.1 .2 .4 .3 .3 .3 .2	.1 .3 .4 .3 .3 .3	.1 .4 .4 .3 .3 .3 .3	.1 .4 .4 .3 .3 .3 .2	.1 .3 .4 .3 .3 .3	:1 :3 :3 :3 :3 :2 :2
						Total acc	ession					
1948	4.6 3.2 3.6 5.2 4.4 4.4 2.8 8.3	3.9 2.9 3.2 4.5 3.9 4.2 2.5	4.0 3.0 3.6 4.6 3.9 4.4 2.8	4.0 2.9 3.8 4.5 3.7 4.3 2.4	4.1 3.5 4.4 4.5 3.9 4.1 2.7	8.7 4.4 4.8 4.9 4.9 5.1 3.5	4.7 3.5 4.7 4.2 4.4 4.1 2.9	8.0 4.4 6.6 4.5 8.9 4.3 3.3	8.1 4.1 8.7 4.3 8.6 4.0 3.4	4. 5 3. 7 5. 2 4. 4 5. 2 3. 3 3. 6	3.9 3.3 4.0 3.9 4.0 2.7 3.3	2.7 3.2 3.0 3.0 3.3 2.1 2.5

¹ Month-to-month changes in total employment in manufacturing industries as indicated by labor turnover rates are not comparable with the changes shown by the Bureau's employment and payroll reports, for the following

reasons:

(1) A cressions and separations are computed for the entire calendar month; the employment and payroll reports, for the most part, refer to a 1-week pay period ending nearest the 18th of the month.

(2) The turnover sample is not so large as that of the employment and payroll sample and includes proportionately fewer small plants; certain industries are not overed. The major industries encluded are: printing, publishing, and allied industries; canning and preserving fruits, vegetables, and seafoods; women's, misses, and children's outerwear; and fertilizers.

⁽³⁾ Plants are not included in the turnover computations in months when work stoppages are in progress; the influence of such stoppage is reflected, however, in the employment and payroll figures. Prior to 1943, rates relate to production workers only

^{*} Preliminary.

[†]Beginning with data for October 1952, components may not add to total because of rounding.

Note.—Information on concepts, methodology, etc., is given in a technical note on Measurement of Labor Turnover, which appeared in the May 1953 Monthly Labor Review.

Table B-2: Monthly labor turnover rates (per 100 employees) in selected groups and industries '

					Bepare	tion					Total a	
Industry group and industry	To	tal	Qu	ils.	Disch	arp	Las	nof	Misc. milit	inci.	10121	
, , , , , , , , , , , , , , , , , , , ,	Feb. 1955	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 1988	Jan. 1955	Feb. 1955	Jan. 1955	Peb. 1955	Jan. 1955
Manufacturing											1	
All manufacturing	2.5	3.0	1.0	1.0	0.2	0.2	1.1	1.5 1.5 1.4	0.2	0.3	3.3 3.6 2.7	3.
Nondurable goods !	2.5	2.9	1.0	1.0	:2	.2	1.2	1.4	:1	.3		
	2.4	2.9	1.0	1.0	.2	.3	1.2	1.8	.1	.1	2.3	2.1
Ordnance and accessories		4.5		.0		.2	2.3	3.2	.1	:3	3.2 4.1	1 2 2
Meat products	3.4 5.2 2.6	5.3	.7	.7	.2	.1	4.2 1.2 1.2	4.2	.2	.3	1.1	2
Grain-mill products	2.6	1.9 3.7	.0	1.3	.3	-1	1.2	2.0	:1	:1	2.4	2.
Beverages:	2.4	0.7							6.1	.2	8.4	3.
Malt liquors	1.9	4.3	.2	.4	.1	.1	1.8	3.7	.1			
obacco manufactures	1.7	3.7	1.1	1.3	.2	:1	.3	2.2 1.7	:1	:1	2.3	1.
Cignrettes	1.3	2.8	1.0	1.0	.2	:1	6	2.9	.1	.2	1. 5 3. 3	1.
Cirars Tobacco and snuff	2.2	1.7	.4	.4	.1	.2	.1	.7	.1		.7	
Textile mill products	2.5	8.1	1.2	1.2	.2	.3	.9	1.4	-1	.8	2.0	2.
Yarn and thread mills	2.7	3.4		1.3	.2	.2	1.2	1.7	:1	.2	3.2	3.
Yarn and thread mills. Broad-woven fabric mills.	2.6	2.8	1.4	1.3	. 2	.3	.7	.71	:3	.2	3.0	3. 4. 2. 2. 3.
Broad-woven fabric mills Cotton, silk, synthetic fiber Woolen and worsted Knitting mills	2.7 2.6 2.6 3.5	8.1	1.4	1.1	.1	.3 .3 .3	2.1	2.0	:2	.8	3.6 3.2 3.0 5.2 3.2 2.4	4.
Knitting mills	2.4 1.7	4.0	1.3 1.3 1.1	1.4	-1	:1	.9	1.6	(0)	:11	2.4	2.
Full-fashioned hostery	3.3	3.3 4.6	1.1	1.4	i	.2	1.8	1.7	.2	1.5	2.8	3.
Seamless hostery	2.1	4.3	1.4	1.6	(4)	:1	.71	2.6	(4)	.1	9.4	3.
Knit underwear Dyeing and finishing textiles	1.9	2.4	1.0	.8	:1	.5	.5	1. 7 2. 6 1. 5 1. 2	.3	.2	2.4	2.
Carpets, rugs, other floor noverings	1.9						10					
pparel and other finished textile prod-	2.5	3.3	1.7	2.1	:1	.1	.6	1.0	:1	:1	3.8	3.
Men's and hove enits and coats	2.5	2.6	1.6	2.1 1.6	.1	.2	.8	.6	.1	.2	7.0	a.
Men's and boys' suits and coats. Men's and boys' furnishings and work elothing.	2.6	3.8	1.8	2.3	.1	.1	.6	1.2	.1	.1	4.5	3.4
umber and wood products (except fur-	3.4	4.4	1.5	1.4	.2	.3	1. 5	2.4	3	.8	8.6	4. 7. 3.
Logging earnps and contractors	(1)	10.5	(8)	2.7	(9)	.8	2.0	7.0	(*)	.2	4.1	3.
Sawmills and planing mills	3.9	3.5	1.5	1.2	.1	.8	2.0	1.7				
Sawmills and planing mills Millwork, plywood, and prefabricated structural wood products	1.8	2.1	.8	.8	.2	.1	.6	.9	.2	.3	2.3	2.
structural wood products	3.2	3.5		1.3	.3	.3	1.5	1.7	.2	.2	2.7	3. 4
Bousehold furniture	3.5	3.9	1.8	1.4	.3	.3	1.6	1.9	.2	.2	2.8	3.
Other furniture and fixtures	2.7	2.7	1.1		.2	.2		1		.3	2.0	9
aper and aillied products	2.0	2.2	.9	. 6	.2	.1	.8	.8	:1	.3	1.4	2. 1. 2.
Pulp, paper, and paperboard mills Paperboard containers and boxes	3.3	3.1	1.2	1.2	.4	.8	1.5	1.4	.2	.8	2.3	
Paperboard containers and boses	1.2	1.3	. 5		.1	.1	.4	.5	.1	.1	1.3	1.0
Themicals and allied products Industrial inorganic chemicals. Industrial organic chemicals	1.1	1.9	.7	. 5	:1	1	.2	. 8	. 1	.2	1.0	l.
Industrial organic chemicals	.7	1.0	.3		(4)	83	:4	:4	:1	-11	2.5	i.
Synthetic fibers	.8	1.3	.6 .9	.4 .3 .7 .6	(0)	(3)	.11	.4	.1	.2	1.4	1.1
Synthetic fibers Drugs and medicines Paints, pigments, and fillers	1.4	1.6	.9		.2	,1	.8		.1			1.
roducts of petroleum and coal	1.1	.0	.2	.8	(3)	8	.5	.3	.3	:2	.8	
Petroleum refining	1.1	.6	.2		(*)							2.1
tubber products	2. 1 1. 2	2.0	1.0	.6	:1	(4).1	:8	.8	.2	.2	2.5 2.1 2.0 3.1	2. 2. 2. 3.
Tires and inner tubes	2.4	3.2	1.6	1.6	.1	.1	.6	1.2	.11	.1	2.0	2.
Tires and inner tubes	2.9	3.2 2.3	1.1	.8	.2	.2	1.3	1.1	.8			
eather and leather products	2.5	2.8	1.6	1.5	.2	:1	.6	.8	:1	.2 .2 .2	3.3	3.
Leather	1.6	2.0	1.8	1.7	. 2	.1	.5	1.0	:1	.2	2.6	3.1 2.4
Leather Footwear (except rubber)		-		.6	.1	.1	1.1	1.1	.3		2.5	2.1
done, clay, and glass products	2.2	2.1	.6	.4	.1	.1	2.1	1.9	.4	.3	2.5	3.1
	2.6	2.7 1.2	.4	. 8	.1	.1	.1	1.0	.3	.4	1.0	3.
Structural clay products	1.5	2.2	1.0	1.0	.2	.1	1.1	1.4	(4)	.2	2.5	2. 3. 1. 3. 2.
			.7	.6	.2	.1	.8	1.1	.2	. 3	4.0	3.4
rimary metal industries. Blast furnaces, steelworks, and rolling mills.	1.0	2.1		. 5	.1	.1	.2	.8	.2	.3	3.6	2.1 4.1 5.4
Iron and steel foundries	2.5	2.5	1.3	.9	. 6	.3	. 6	1.1	:1	.2	5. 4 6. 0	-
Oray-iron foundries	3.1	2.5	1.6	1.1	. 9	:1	.2	.8	.1	.2	6.6	A.
Malleable-iron foundries	2.6 1.7	2.4	.8	.6	.2	.2	.2	1.5	.2	.2	3.9	4.
Primary smelting and refining of non-		-										
Primary smelting and refining of copper, lead, and sinc*	1.4	1.3	.5	.6	.2	.2	.8	.2	.4	.8	1.8	L
Rolling, drawing, and alloying of non-												
Services in Parking										1		
Rolling, drawing, and alloying of	.8	1.3	.3	1.1	.1	-1	.2	1.0	-1	:4	1.2	3.
100 100 100 100 100 100 100 100 100 100	2.7	3.5	1.4	1.1	.8	.2	.8	1.9	.8		2.0	0.1
Nonferrous foundries Other primary metal industries; Iron and steel forgings	4. 1							1				4

Table B-2: Monthly labor turnover rates (per 100 employees) in selected groups and industries ¹—Continued

	- 1				Берш	ration						
Industry group and industry	To	tal	Qi	ıit	Disc	harge	La	roff	Mise. mili	inel.	Total a	coessign
	Feb. 1966	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 1988	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 1955	Jan. 1966
Monufacturing-Cox singed		-			-							
Fabricated metal products (except ord- nance, machinery, and transportation												
Acetermon ()	2.8	3.8	0.9	1.1	0.2	0.2	1.4	2.2	0.8	0.2	3.4	3.
Outlery bandtools, and hardware Cuttery and edge tools	(4)	3.2 4.3	1.0	1.3	(1) 2	.3	1.4	1.4 3.2 1.6	(4) . 3	0.2 .3 .1	(4)	3. 1. 3. 4.
	2.9	2.8	.7	.7	.1	.2	1.8	1.6	.3	.4	2.7	3.
Heating apparatus (except electric)	2.9	3.1	1.4	1.6	.3	-4	1.0	.9	.2	.3	4.1	4.
and plumbers' supplies Sanitary ware and plumbers' sup-	2.5	3.7	1.2	1.2	.4	.3	.8	2.0	.1	.2	4.1	3.
	2.9	2.6	1.2	1.3	.6	. 8	.9	.6	.1	.2	8.4	2.1
Off burners, nonelectric heating and cooking apparatus, not else where classified	2.2	4.7	1.1	1.1			.7	3.2		.2	4.7	
Fabricated structural metal products.	2.7	8.2	.8	.6	.1	:1	1.7	2.2	.1	.2	2.5	4.
Metal stamping, coating, and engrav- ing	3.0	4.8	.9	1.1	.3	.2	1.6	2.5	.2	.4	4.1	8.
Machinery (except electrical)	1.8	2.2	.7	.7	1	.1	.7	1.1	.2	.4	2.8	2.1
Machinery (except electrical) Engines and turbines	1.9	2.1	.8	.9	.2 .2 .1 .1	.1	.8	. 9	.1	.31	3.0	2.6
Agricultural machinery and tractors Construction and mining machinery	1.7	1.5	.8	.7	.2	.1	.4	1.1	-3	.3	3.4	8.
Metalworking machinery	1.9	2.3	.7	.7	.1	.1	.0	1.5	:1	. 3	2.3	2.3
Machine tools Metalworking machinery (except	1.5	2.6	.6	.5	.1	.1	.6	1.7	.2	.3	1.8	1.
	1.8	2.0	. 5	.6	:1	.1	1.0	1.0	.1	.3	1.7	1.6
Machine-tool accessories Special-industry machinery (except	2.6	2.9	1.0	1.0	.1	.2	1.4	1.5	.1	.2	8.8	4.1
metalworking machinery)	1.7	1.9	.7	.7	.1	.1	.7	.8	.1	.3	1.9	2.1
General industrial machinery Office and store machines and devices	2.0	2.7	.8	1.0	:1	.2	.9	1.6	:1	.2	2.2	2.0
Berylow-Industry and household me-							. 8	.2				
chines Miscellaneous machinery parts	2.0 1.6	2.0	.8	.6	:2	:1	.9	1.6	.2	-4	4.8	3.5
Electrical machinery	2.6	2.7	1.2	1.0	.2	.1	1.1	1.4	.2	-4	3.0	2.6
Electrical generating, transmission, distribution, and industrial appa-	1.8								.1	.4		
ratus Communication equipment Ratics, phonographs, television sets, and equipment Telephone, telegraph, and related equipment	(9)	3.0	(0) .8	1.2	(1)	.1	(4) .7	1.1	(4) 2	.3	2.8	2.1
Radios, phonographs, television	3.3	3.6	1.7									
Telephone, telegraph, and related		0.0	1.7	1.3	.2	.2	1.3	1.8	.2	.8	3.1	3.0
equipment	(4)	1.4	(1)	.7	(9)	.1	(3)	.3	(8)	.3	(8)	2.1
equipment Electrical appliances, lamps, and mis- cellaneous products	2.7	3.2	.0	.9	.2	.1	1.4	1.9	.2	.8	2.7	3.1
Transportation equipment	3.1		.0	1.1	.2	.2	1.7	1.7	.1	.4	4.7	4.9
Automobiles Aircraft and parts	3,3	3.4	1.3	1.1	.4	.2	1.1	1.2	.7	- 5	5.6	5.4
Alternit and parts	2. 4 1. 8	2.5	1.0	1.1	:1	:1	.5	1.7	:1	:1	2.6	2.5
Aircraft engines and parts Aircraft propellers and parts	2.5	2.2	1.0	. 1.2	.2	.1	1.2	1.0	.11	.1 .2 .1	2.6	1.8
Other aircraft parts and equip-	.,	9.1	(9)		(0)		(8)	8.0	(4)	.1	(1)	. 9
manufi	10, 6	4.4	1.0	9	(1)	.2	(8)	3.1	(1)	.1	(9)	2.7
Ship and boat building and repairing. Railroad equipment	(1)	11.4	(4)	1.8	(8) 4	(4) . 8	9.0	9. 4	(1)	(1) 2	10.2	(4)
Raffrond and street care	4.4	4.8	(0)	(1)	(4)	(1)	(0)	(0)	(1)	(8)	(0)	(6)
Other transportation equipment	.9	2.9	.8	:7	(4) . 2	:3	2.7	3.5	(4) . 6	.3	5. 8 4. 2	12. 2 15. 4
Instruments and related products	1.4	1.7			(e) (e)	.1	.7	1.0	.1		1.8	1.7
Photographic apparatus	(8)	1.0	(8)	:4		(4)	(8)	. 5	(6)	:1	(4)	.7
Watches and clocks Professional and scientific instruments.	1.2	2.1	.6	.6	:1	:1	.3	1.2	.2	.2	1.9	1.8
Miscellaneous manufacturing industries	3.4	3.5	1.7	1.3	.8	.2	1.1	1.7	.2	.2	6.1	5.0
Jowelry, stiverware, and plated ware	2.8	3.0	1.4	1.8	.3	.2	.9	1.2	.3	.3	2.1	2.2
Metal mining	4.0	3.0	3.0	2.0	2	.3	. 5	.3	.3	-4	4.3	4.3
Capper mining	3.5	3.4	2.9	2.3	(*)	.1	:7	.4	.3	. 5	1.4	4.7
Copper mining	1.6	3.4	1.0	2.3	(4)	(4)	.4	.2	:1	.2	1.4	2.2
Anthracite mining	2.6	21. 4	.4	.6	(4)	(4)	1.7	20.6	.4	.2	.8	1.7
Bituminous-coal mining	1.0	1.5	.8	.3	(4)	.1	. 5	1.0	.2	.2	1.9	1.3
Demmunication:	-		-								400	
Telegraph	(2)	1.3	(1)	1.0	(8)	.1	(4)	:4	(4)	:1	(3)	1.6

se footnote 1, table B-1. Current month data subject to revision without tion; revised figures for earlier months will be indicated by footnotes. se footnote 2, table A-2. Printing, publishing, and allied industries are

C: Earnings and Hours

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1

										M	ining					-			
							M	etal				ed and	-		Anthr		lao	Bitumi	nome
Ye	er and month	_	tal: Me	Avg.	AVE.	Iron	Avg.	Ave.	Copper	_	Avg.	A		AVE.	Anthe	Avg.	Avg.	Ave	AVE.
		Avg. wkly. earn- ings	wkly. bours	hriy.	Avg. wkly. earn- ings	wkly. hours	hrly. earn- ings	Avg. wkly. mm- ings	wkly.	Avg. hrly. earn- lags	wkly. earn- ings	wkly.	Avg. hrly. earn- ings	Avg. wkly. earn- ings	wkly.	hrly. earn- ings	wkiy. enrn- ings	wkly.	hrty.
1962: 1963: 1964:	A verage A verage February March April May June July August September October November January February	\$81, 65 88, 54 85, 49 82, 62 81, 19 82, 00 83, 84 83, 63 84, 03 83, 92 85, 06 85, 07 86, 20	40. 4 40. 2 40. 7 41. 8 42. 9	\$1. 86 2. 06 2. 06 2. 06 2. 06 2. 06 2. 07 2. 08 2. 08 2. 08 2. 09 2. 11 2. 09	76. 74 77. 80 81. 32 83. 82 82. 94 80. 81 80. 30 78. 94 81. 92 86. 19	43. 9 42. 4 40. 2 36. 8 36. 7 38. 0 39. 1 38. 4 36. 5 35. 4 36. 5 36. 2	\$1. 83 2. 14 2. 14 2. 12 2. 12 2. 14 2. 20 2. 16 2. 22 2. 20 2. 23 2. 23 2. 21 2. 20	84, 25 84, 25 87, 34 83, 03 84, 22 87, 54 86, 94 90, 25	45.6 45.8 43.2 41.5 41.5 42.7 42.7 42.0 43.8 45.8 46.8	\$1. 85 2. 00 2. 05 2. 03 2. 00 2. 05 2. 05 2. 07 2. 07 2. 07 2. 08 2. 09 2. 08 2. 09 2. 08	78. 24 75. 76 74. 07 74. 19 78. 20 74. 63 75. 30 80. 56 83. 96	42. 8 41. 7 39. 7 39. 3 39. 6 40. 3 39. 4 40. 1 40. 0 30. 8 40. 7 42. 4 43. 5 42. 5 42. 5	\$1, 92 1, 92 1, 88 1, 86 1, 90 1, 88 1, 85 1, 86 1, 96 1, 90 1, 93	871. 19 72. 91 74. 84 63. 74 64. 45 62. 74 96. 20 73. 56 82. 50 56. 88 86. 26 88. 26 88 88. 26 88 88 88 88 88 88 88 88 88 88 88 88 88	81. 5 29. 4 29. 7 25. 6 26. 2 25. 4 36. 3 29. 2 33. 0 23. 6 34. 1 33. 7 35. 1 31. 9 36. 3	42, 26 2, 48 2, 82 2, 49 2, 47 2, 65 2, 52 2, 50 2, 41 2, 53 2, 53 2, 54 2, 62 2, 41 2, 63	878. 09 85. 31 79. 04 73. 06 71. 67 76. 39 83. 00 75. 39 82. 09 81. 17 87. 54 92. 01 92. 01 94. 75	34. 1 34. 4 32. 0 29. 7 28. 9 30. 9 33. 2 30. 4 33. 1 32. 6 35. 3 36. 6 37. 1 37. 1 37. 9	\$2.24 2.47 2.46 2.47 2.50 2.46 2.46 2.46 2.46 2.46 2.46 2.46 2.46
			M	ining	Continu	ed						Con		netrueti					
		natural (exc	gas proc ept cont	rset	Nonmand	etallic m quarry			Contraction			Nonbu	Oding	-	ing one		Other	non but	ding
	A verage A verage February March A pril May June July August Sentember	\$85. 90 90. 39 91. 08 90. 45 90. 45 94. 58 90. 63 92. 57 93. 98 93. 02	41. 1 40. 9 40. 3 40. 2 40. 2 41. 3 40. 1 40. 6 41. 4 40. 8 40. 2	\$2.09 2.21 2.25 2.25 2.25 2.29 2.28 2.27 2.28 2.27 2.28 2.27	\$71. 10 75. 99 73. 79 74. 22 75. 08 77. 88 78. 88 80. 46 79. 83 79. 57 79. 92	45.0 44.7 42.9 42.9 43.4 44.5 44.5 45.1 44.7	\$1.58 1.70 1.72 1.73 1.75 1.75 1.76 1.77 1.77 1.77	\$87. 85 91. 61 92. 85 93. 24 92. 87 94. 50 95. 63 95. 63 95. 63 95. 84	38. 7 37. 7 36. 7 37. 0 37. 0 37. 5 38. 1 38. 1 38. 0 36. 8	\$2. 27 2. 43 2. 53 2. 52 2. 51 2. 51 2. 51 2. 51 2. 53	\$86, 72 90, 27 91, 14 90, 12 89, 60 93, 79 96, 14 97, 29 97, 44	41. 1 40. 3 39. 8 39. 7 39. 3 40. 6 41. 8 42. 3 42. 6 30. 9	\$2.11 2.24 2.29 2.27 2.28 2.31 2.30 2.30 2.32 2.33	\$60. 26 85. 25 81. 37 60. 98 82. 53 88. 97 91. 81 95. 26 93. 09 88. 75	41. 8 41. 2 39. 8 39. 8 39. 3 41. 0 42. 7 43. 9 42. 7 40. 9	\$1. 92 2. 07 2. 08 2. 10 2. 17 2. 18 2. 17 2. 18 2. 18 2. 18 2. 09 2. 00	\$91. 86 93. 86 97. 20 95. 92 94. 71 97. 93 100. 28 99. 39 100. 77 95. 33	40. 6 39. 6 40. 0 36. 8 39. 3 40. 3 41. 1 40. 9 41. 3 39. 0	\$2.26 2.37 2.43 2.41 2.41 2.42 2.43 2.44 2.47
1988:	September October November December January	90, 85 90, 68 90, 68 95, 49 89, 15	40. 2 40. 2 40. 3 41. 7 39. 8	2, 26 2, 26 2, 25 2, 29 2, 24	79. 57 79. 92 78. 59 76. 38 75. 05 74. 23	44.7 44.9 44.4 43.4 42.4 41.7	1.78 1.77 1.76 1.77 1.78	93. 84 95. 74 94. 32 94. 54 91. 95 91. 07	38. 1 38. 0 36. 6 37. 4 36. 7 36. 5 35. 5 35. 3	2 51 2 55 2 56 2 57 2 59 2 59 2 58	94. 13 94. 39 80. 47 85. 01 87. 17	46. 4 40. 3 38. 4 36. 8 37. 9	2, 33 2, 34 2, 33 2, 31 2, 30	86, 62 88, 94 80, 51 76, 70 78, 58	40. 1 40. 8 37. 8 36. 7 37. 6	2.16 2.18 2.13 2.09 2.09	100.53 98.55 96.08 90.16 92.96	40. 7 39. 9 38. 9 36. 8 38. 1	2. 47 2. 47 2. 47 2. 45 2. 44
									Bui	iding o	nstruct		41.4-4	le con tre	and one				
		Total:	Buildin	g con-	Genera	d contra	etors	Total:	Special-	trade	Plum hi	ng and b	1		inting as	nd	Elec	trimi w	ork
1649-	Average	\$88.01	28.1	\$2.31	\$82.78	20. 4	\$2.15	901.60	atractor	\$2.44	204. 92	35.0	92.44	***	35.2	82 35	\$110. 30i	40.7	\$2.71
1965: 1966:	A verage February Mareh Mareh May Lune Luly May Luly September October November December January February	91, 76 93, 24 94, 29 94, 17 94, 69 95, 72 95, 20 94, 32 96, 26 94, 15 95, 40 93, 28 91, 96	37. 0 36. 0 36. 5 36. 5 36. 5 37. 1 36. 9 37. 0 36. 0 36. 6 35. 8 36. 0 35. 2 34. 7	2 48 2 89 2 88 2 88 2 58 2 60 2 62 2 63 2 65 2 65 2 65	87. 78 85. 94 90. 41 80. 55 89. 67 90. 04 89. 65 91. 51 89. 00 91. 62 89. 61 90. 83 88. 55 86. 18	37. 5 36. 3 36. 9 36. 7 36. 9 36. 7 36. 9 35. 6 36. 5 36. 5 36. 5 36. 7	2. 34 2. 45 2. 45 2. 44 2. 44 2. 44 2. 85 2. 85 2. 85 2. 85 2. 83 2. 83 2. 83	95. 05 96. 30 97. 11 97. 28 98. 36 99. 70 99. 80 99. 90 98. 10 99. 46 97. 58 96. 37 95. 82	36. 7 35. 8 36. 1 36. 3 37. 2 37. 1 37. 0 36. 2 36. 2 36. 9 36. 1 35. 3	2.69 2.69 2.68 2.68 2.68 2.69 2.71 2.71 2.72 2.73 2.73 2.73	98, 30 101, 30 101, 68 101, 41 101, 95 103, 41 103, 52 102, 92 103, 63 100, 10 107, 20 105, 64 103, 57	38. 1 37. 8 37. 8 37. 9 38. 3 38. 2 38. 2 37. 7 38. 1 36. 8 37. 7 38. 8	2.69 2.69 2.69 2.70 2.70 2.71 2.73 2.72 2.77 2.77 2.77 2.77	87. 28 88. 58 80. 27 89. 78 92. 04 92. 39 92. 31 92. 57 92. 75 90. 37 91, 12 86. 72 90. 05	34. 7 33. 7 34. 2 34. 6 34. 6 35. 4 35. 4 35. 1 34. 8 35. 1 34. 0 32. 6 33. 6	2. 51 2. 59 2. 59 2. 58 2. 59 2. 60 2. 61 2. 65 2. 65 2. 65 2. 65 2. 65	111. 61 112. 42 112. 42 110. 98 113. 59 113. 39 112. 40 113. 86 110. 98 115. 05 112. 18 113. 30 113. 00 110. 96	39. 3 38. 9 38. 9 38. 9 39. 1 39. 0 37. 9 38. 8 38. 7 38. 0	2.84 2.89 2.89 2.99 2.90 2.90 2.90 2.90 2.90 2.90 2.9
			eial-trac								Man	utsetur	ing						
		Other	special-t	rade		at: Manu	g-	Dura	ble good	10.	Nondu	rable go	ods *	Total and	: Ordna	nce tes	Total	nd king roducts : Food o	and
1963: 1 1964:]	A verage A verage A verage February March April May use uily uagust september betober November December sannary February Soutmary Soutmare	\$88. 43 91. 04 90. 90 91. 87 98. 10 94. 68 98. 89 96. 15 94. 87 93. 90 94. 77 88. 78 88. 78	37. 0 36. 7 34. 3 34. 8 36. 6 36. 6 36. 4 36. 5 36. 8 35. 8 35. 8 35. 8 35. 8	\$2.86 2.85 2.65 2.64 2.63 2.63 2.62 2.62 2.64 2.65 2.66 2.65 2.65 2.67	967, 97 71, 69 71, 28, 70, 71, 13 71, 68 70, 20 71, 06 71, 06 72, 22 73, 57 74, 12 73, 97 74, 34	40. 7 40. 8 39. 6 39. 8 39. 8 39. 8 39. 7 39. 7 39. 7 39. 9 40. 5 40. 2 40. 4	\$1. 67 1. 77 1. 80 1. 79 1. 80 1. 81 1. 81 1. 80 1. 79 1. 81 1. 83 1. 83 1. 84 1. 84	\$73. 46 77. 23 76. 38 76. 00 75. 43 76. 21 76. 40 75. 83 76. 50 77. 39 77. 79. 15 80. 16 80. 56	41. 5 41. 3 40. 2 40. 0 39. 7 39. 9 40. 0 39. 7 40. 1 40. 1 40. 4 40. 8 41. 1 40. 9 41. 1	\$1. 77 1. 87 1. 90 1. 90 1. 90 1. 91 1. 91 1. 91 1. 93 1. 93 1. 94 1. 95 1. 96	\$60. 98 63. 60 64. 02 64. 02 62. 87 63. 91 64. 74 64. 68 65. 24 65. 97 66. 30 66. 02 66. 53	39. 6 39. 5 38. 8 38. 5 38. 9 39. 2 39. 3 39. 2 39. 3 39. 5 39. 7 39. 6	\$1. 54 1. 61 1. 65 1. 65 1. 66 1. 66 1. 66 1. 66 1. 66 1. 67 1. 67 1. 67 1. 68	\$77, 47 77, 90 78, 40 79, 19 78, 21 78, 80 79, 40 79, 80, 60 80, 20 80, 60 81, 41 81, 81 82, 21 81, 20 82, 22	42. 8 41. 0 40. 2 40. 2 40. 1 40. 1 40. 1 40. 1 40. 7 40. 7 40. 7 40. 7	\$1. 81 1. 90 1. 95 1. 97 1. 97 1. 98 1. 99 2. 00 2. 01 2. 01 2. 01 2. 02 2. 03 2. 03	863. 23. 66. 33 67. 67. 67. 67. 84 68. 54 69. 72 67. 57. 68. 30 70. 79 70. 58 70. 07	41. 6 41. 2 40. 5 40. 3 40. 8 41. 4 41. 5 41. 5 41. 3 41. 4 40. 8 40. 5	\$1. 82 1. 61 1. 67 1. 68 1. 68 1. 68 1. 68 1. 64 1. 65 1. 71 1. 71 1. 73 1. 73

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1-Continued

									Manu	facturin	g-Con	tinued							
								Food	and ki	ndred p	rodacts	-Conti	nued						
Y.	ar and month	Mea	at produ	eta 4	Meats	eacking,	whole-	Sauce	per and	neinge	Dali	y preds	ets 4	Conde	nsed and rated mi	i map-	les es	ream an	d ices
		Avg. wkly. earn- ings	Avg. wkly. hours	Avg. brly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrty. earn- ings	Avg. wkiy. carn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. carn- ings	Avg. wkiy. carn- ings	Avg. wkly. hours	Avg. briy. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1962: 1943: 1964: 1964:	A verage A verage February March April May June July A ogust September October November December January February	\$70, 30 74, 87 73, 08 73, 08 74, 74 78, 88 77, 98 78, 07 77, 87 78, 03 83, 03 81, 75 79, 65 76, 90	42.8 42.8 41.7	\$1.69 1.81 1.84 1.84 1.85 1.85 1.87 1.86 1.89 1.91 1.91	\$73. 39 77. 64 75. 22 75. 81 74. 86 76. 97 78. 80 81. 69 81. 14 81. 71 84. 83. 10 78. 78	41. 7 41. 3 30. 8 89. 9 40. 3 41. 1 41. 9 43. 2 42. 4 40. 4	\$1. 76 1. 88 1. 89 1. 90 1. 90 1. 91 1. 91 1. 92 1. 96 2. 01 1. 97 1. 96 1. 96	969, 73 73, 39 73, 35 72, 44 73, 93 76, 36 76, 41 77, 83 76, 96 76, 78 76, 30 79, 00 78, 09 75, 81	42. 0 41. 7 40. 3 30. 8 40. 4 41. 5 41. 5 40. 8 42. 3 41. 6 41. 8 42. 3 41. 8 41. 1 30. 9	1, 90	\$63, 80 68, 05 69, 71 68, 85 69, 01 71, 36 71, 81 69, 85 71, 07 70, 47 68, 36 69, 36 70, 85 71, 55	43. 5 42. 4 42. 8 43. 2	\$1. 48 1. 55 1. 61 1. 50 1. 50 1. 50 1. 61 1. 61 1. 63 1. 62 1. 64 1. 64 1. 64	\$66. 41 69. 77 70. 20 70. 04 70. 81 71. 75 78. 05 74. 08 71. 42 74. 54 70. 31 70. 44 70. 44 72. 45 71. 20	45. 8 45. 0 45. 0 45. 2 45. 7 47. 2 46. 3 46. 3 44. 5 44. 3 45. 0 44. 5	1. 59 1. 59 1. 59 1. 61	\$64. 69 68. 53 71. 40 70. 72 70. 38 69 63 72. 14 74. 26 70. 81 72. 84 71. 74 70. 47 71. 40 71. 23 73. 18	42 5 42 6 42 4 42 2 43 2 44 2 42 4 43 1 42 7 41 7 42 0 41 9	\$1. 67 1. 50 1. 63 1. 64 1. 64 1. 67 1. 69 1. 67 1. 70 1. 70 1. 70
		Can	ning and	pre-	Seafor	d, consi	ed and	Conn	ed fruits s, and s	, rege-	Grain-	mill pre	ducts '	Flour a	md other U produ	grain-	Pro	epared fe	rde
1962: 1953: 1964:	A verage A verage February Mareh April May June July A ugust fleptembe October November Decamber January February	\$51, 68 85, 18 64 38 85, 95 82, 85 84, 72 88, 27 64, 77 86, 89 86, 30 82, 90 81, 61 85, 39 54, 67 85, 71	89. 3 89. 1 87. 5 86. 2 88. 0 85. 6 30. 4 40. 5 40. 8 38. 4 35. 6 38. 2 37. 7 37. 9	\$1, 32 1, 36 1, 45 1, 47 1, 46 1, 44 1, 38 1, 38 1, 38 1, 38 1, 41 1, 45 1, 45 1, 47	\$45, 57 45, 60 42, 41 41, 27 46, 63 46, 63 46, 66 38, 60 48, 64 54, 95 46, 62	81. 0 29. 5 27. 9 26. 8 27. 8 29. 7 31. 6 36. 6 30. 4 30. 7 27. 4 29. 3 32. 7 29. 0 32. 2	\$1. 47 1. 51 1. 52 1. 54 1. 57 1. 42 1. 50 1. 53 1. 39 1. 66 1. 55 1. 51	\$54, 12 85, 76 87, 67 87, 13 85, 63 87, 31 86, 70 57, 82 88, 38 56, 60 83, 27 56, 91 58, 15 58, 71	41. 0 40. 7 39. 5 38. 1 39. 8 40. 5 40. 1 41. 6 42. 0 40. 0 38. 6 39. 8 40. 1	\$1, 32 1, 37 1, 46 1, 46 1, 46 1, 40 1, 39 1, 39 1, 39 1, 29 1, 28 1, 43 1, 43 1, 45 1, 49	\$69. 15 71. 88 72. 65 71. 94 73. 37 76. 32 76. 73 74. 42 77. 92 75. 31 76. 48 75. 26 74. 48	44. 9 44. 1 43. 6 43. 6 44. 2 45. 7 46. 4 44. 3 45. 3 43. 5 43. 5 43. 5	\$1, 84 1, 63 1, 67 1, 66 1, 66 1, 67 1, 69 1, 73 1, 73 1, 73 1, 73 1, 72	\$71. 71 75. 65 77. 68 73. 36 74. 70 76. 39 78. 23 81. 35 79. 57 84. 64 82. 45 84. 73 80. 55 82. 08 80. 28	45. 1 44. 5 44. 3 42. 2 43. 9 44. 7 45. 7 46. 0 45. 3 45. 8 44. 5 45. 1 44. 6	1. 78 1. 84 1. 82 1. 86 1. 81 1. 82	967. 62 69. 30 69. 52 70. 27 70. 47 70. 53 74. 10 72. 85 72. 05 73. 92 72. 19 71. 44 71. 72 70. 79 70. 47	44. 0 44. 2 44. 6 45. 5 47. 8 46. 4 45. 6	1. 57
		Bake	ry prod	nets 4	Dread a	nd other i	hakery	Discuit	e, eracke pretzele	rs, and	-	Bugar 4		Cane	rugar re	fining	,	Beet ougs	,
1962: 1963: 1964:	A verage A verage Pebruary Mareb April May June July August fieptember October November December January February	\$51, 87 64, 84 66, 42 67, 08 67, 62 68, 14 68, 14 68, 88 68, 28 68, 28 69, 02	40.4	\$1. 46 1. 57 1. 62 1. 63 1. 64 1. 65 1. 65 1. 67 1. 68 1. 68 1. 68 1. 68 1. 68	963, 38 66, 24 67, 69 68, 39 69, 72 70, 21 70, 04 70, 62 70, 11 70, 62 70, 58	41. 7 41. 4 41. 0 40. 9 41. 2 41. 4 41. 3 41. 3 41. 3 41. 3 41. 0 41. 3 40. 7	\$1, 52 1, 60 1, 65 1, 65 1, 66 1, 67 1, 70 1, 70 1, 71 1, 71 1, 71 1, 71 1, 72 1, 73	\$56, 17 58, 92 61, 09 61, 66 60, 83 60, 68 63, 24 61, 75 60, 76 62, 40 61, 39 61, 39 61, 54 62, 33	41. 3 41. 2 41. 0 40. 3 39. 5 39. 4 40. 8 40. 8 40. 0 39. 2 40. 0 39. 1 39. 1 39. 2 39. 7	\$1, 36 1, 43 1, 49 1, 53 1, 54 1, 54 1, 56 1, 56 1, 56 1, 56 1, 57 1, 57	\$64. 41 71. 19 71. 28 76. 79 68. 99 72. 92 72. 63 72. 57 71. 78 68. 06 78. 16 73. 78 74. 45 73. 69	42. 1 43. 4 41. 2 42. 9 39. 2 41. 2 41. 5 61. 0 41. 1 41. 5 50. 1 47. 6 42. 3 61. 4	\$1. 83 1. 64 1. 73 1. 79 1. 76 1. 77 1. 75 1. 77 1. 76 1. 77 1. 86 1. 86 1. 76 1. 78	\$66. 58 74. 94 72. 31 82. 53 72. 31 77. 33 78. 86 77. 15 75. 62 77. 00 74. 03 79. 84 74. 96 73. 66 77. 14	41, 1 42, 1 39, 3 43, 9 39, 3 41, 8 42, 0 41, 7 41, 4 39, 8 40, 3 30, 6 40, 6	\$1. 62 1. 78 1. 84 1. 84 1. 85 1. 83 1. 87 1. 84 1. 86 1. 90 1. 90	\$65, 94 69, 80 75, 78 70, 20 66, 97 71, 38 70, 86 70, 80 72, 16 67, 78 80, 02 75, 14 81, 09 72, 50	42.0 42.3 42.1 30.0 37.0 40.1 40.5 40.5 42.9 49.7 46.1 44.8 39.4	\$1. 67 1. 68 1. 80 1. 80 1. 81 1. 78 1. 77 1. 78 1. 77 1. 76 1. 60 1. 61 1. 63 1. 81
		Confe	etioner; id prodi	end icts '	Co	nfections	""	Be	verages	•	Bottle	ed soft di	inke	M	a it l iqua	"	Distille bies	id, rectifi uded liqu	ed, and
1963: 1964: 1964:	A verage	\$82, 27 \$3, 45 \$5, 46 \$5, 16 \$6, 34 \$6, 34 \$7, 17 \$4, 91 \$5, 65 \$7, 00 \$5, 65 \$5, 44 \$6, 26 \$7, 31	30, 9 39, 3 39, 3 39, 4 39, 7 38, 7 38, 7 39, 7 39, 4 40, 2 39, 4 39, 6 39, 9 39, 7 39, 8	\$1.31 1.36 1.40 1.43 1.43 1.43 1.44 1.43 1.42 1.41 1.40 1.41	\$50. 67 81. 74 83. 69 83. 93 83. 13 85. 04 81. 79 83. 84 83. 84 84. 65 84. 65 85. 18	39, 9 39, 2 39, 2 38, 9 38, 8 38, 5 39, 6 37, 8 30, 3 30, 6 39, 6 39, 6 39, 6 39, 6 30, 3 30, 6 30, 7	\$1, 27 1, 32 1, 38 1, 37 1, 39 1, 37 1, 37 1, 37 1, 37 1, 37 1, 37 1, 37 1, 36 1, 36 1, 38	971, 14 76, 94 76, 80 77, 79 78, 57 78, 18 80, 56 82, 17 78, 78 79, 17 78, 78 79, 90 78, 21 77, 62 78, 90	41. 6 41. 1 40. 0 40. 1 40. 3 41. 1 41. 5 40. 6 40. 4 39. 9 30. 5 39. 4	\$1.71 1.85 1.92 1.94 1.94 1.96 1.98 1.95 1.95 1.95 1.95	\$55, 73 60, 49 60, 69 60, 69 61, 30 60, 42 63, 62 63, 94 62, 03 61, 63 61, 59 94 60, 78 89, 24	43. 2 42. 6 41. 0 41. 7 61. 1 42. 7 42. 2 42. 2 42. 5 41. 9 60. 5 40. 3 40. 7	\$1. 29 1. 42 1. 48 1. 48 1. 47 1. 49 1. 48 1. 47 1. 47 1. 47 1. 47	182. 20, 89. 79 89. 55 91. 35 92. 46 92. 92 95. 30 97. 00 93. 03 93. 60 91. 80 92. 20 93. 53 91. 55 92. 90	41. 2 41. 0 39. 8 39. 9 40. 2 40. 4 60. 9 41. 1 40. 0 39. 4 39. 4 39. 8 39. 3	\$2.00 2.19 2.26 3.29 2.30 2.30 2.30 2.30 2.31 3.32 2.34 2.35 2.34 2.35	\$79. 88 71. 42 73. 54 73. 55 75. 26 73. 53 74. 31 75. 66 73. 74 11 76. 25 80. 60 72. 64 75. 77, 37	30, ¢ 38, 4 38, 3 38, 7 30, 2 38, 7 38, 5 39, 2 30, 1 40, 1 36, 5 37, 38, 3	\$1. 79 1. 86 1. 92 1. 90 1. 90 1. 90 1. 90 1. 94 2. 01 1. 94 2. 01 2. 02 2. 02 2. 02

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									heturin	g-Con	tinued							
	Miso	ellaneou producti	Food an					d sufacture	-	To	tal: Tob	9600		ignrett	uhetur		Cigara	
Year and month		producti			rup, my nd stare	•			-	ma	nufactu	red			_	_		
	Avg. wkly. earn- ings	Avg. wkiy. hours	Avg. hriy. carn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. carn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkiy. hours	Avg. briy. carn- ings
1962: Average. 1963: Average. 1964: February. March April May June July August September October November December	900. 33 63. 12 66. 36 65. 16 65. 79 65. 31 66. 94 67. 68 66. 94 67. 68 66. 96	42.3 42.4 41.6	1. 56 1. 57 1. 57 1. 57 1. 57 1. 58 1. 59 1. 60	\$77.00 80.94 80.90 81.02 79.49 82.84 80.90 84.74 90.29 84.97 86.96 85.73 82.06 81.09	43. 8 42. 6 41. 7 42. 7 41. 7 41. 7 43. 8 45. 6 42. 7 43. 7 43. 7 43. 3 41. 8	\$1.77 1.90 1.94 1.92 1.92 1.94 1.96 1.96 1.90 1.90 1.90	\$59. 80 63. 34 64. 36 65. 42 65. 71 64. 18 67. 45 66. 46 66. 27 68. 86 66. 28 66. 28 65. 56	46. 0 45. 9 45. 6 45. 6 46. 6 45. 2 47. 5 44. 8 45. 7 44. 8 45. 4 45. 4	\$1.38 1.41 1.41 1.41 1.42 1.42 1.42 1.42 1.45 1.47 1.46	\$44. 98 47. 37 46. 31 47. 82 49. 01 49. 96 81. 71 51. 54 49. 67 49. 67 49. 69 49. 72 47. 60 49. 92 50. 14	(80), M	\$1. 17 1. 24 1. 29 1. 35 1. 34 1. 35 1. 30 1. 24 1. 29 1. 30 1. 33	61.88	30. 3 38. 8 36. 2 36. 1 38. 1 38. 6 40. 7 41. 3 41. 3 41. 1 28. 2 41. 3 40. 2 39. 0	\$1. 44 1. 51 1. 86 1. 87 1. 60 1. 61 1. 63 1. 62 1. 63 1. 62 1. 63	540, 13 42, 71 41, 95 41, 52 42, 25 42, 09 42, 21 41, 86 42, 90 43, 73 44, 96 44, 96 44, 88	87. 6 87. 8 86. 8 86. 7 86. 6 36. 7 86. 6 37. 7 88. 5 38. 1 36. 6 1 36. 4	01. 07 L. 12 L. 16 1. 18 1. 18
February	66. 82	41. 5 obacco r		81.71	41.9	1.98	65, 95	45, 8	1. 47	49. 71	37. 1	1.34	63. 96 produc		1. 64	41, 88 42, 50	36. 4	1. 17
	-	coo and		Tobac	oo stem	ming	Total	Textile	mill	Scourin	g and or			and th	read	y	'arn mili	
1989: A warmen	847.74		41.00	-	30.1	90 96					40.0	81. 57	949.16	M. 7	\$1.27	849.15	38.7	81. 27
1955: A verage. 1955: A verage. 1956: February. Mary. May. June. July. August. Septiember. October. November. December. 1955: January. February.	847. 74 80. 90 80. 92 49. 76 81. 80 83. 02 61. 97 85. 10 86. 63 84. 83 84. 83 84. 20 83. 28 80. 54	36.6 38.8 38.9 38.4 37.2 37.9 37.0	\$1. 28 1. 35 1. 38 1. 39 1. 40 1. 41 1. 42 1. 42 1. 43 1. 43 1. 43 1. 44	38. 91 39. 73 38. 63 41. 54 44. 53 45. 14 47. 00 42. 12 37. 86 38. 21 39. 95 34. 17 30. 59 39. 70 40. 54	38. 2 34. 8 35. 2 36. 4 37. 9 35. 1 36. 4 39. 8 41. 2 33. 5 37. 7 37. 1 36. 2	1.04 1.11 1.18 1.23 1.24 1.29 1.04 .96 .97 1.02 1.05 1.07	\$33. 18 \$3. 57 52. 06 51. 08 50. 46 51. 41 52. 36 52. 59 53. 31 54. 65 55. 07 54. 25 54. 80	39, 1 39, 1 38, 0 38, 0 37, 1 37, 3 37, 8 38, 5 38, 5 39, 2 39, 9 40, 2 39, 6 40, 0	\$1.36 1.37 1.37 1.36 1.36 1.36 1.36 1.36 1.36 1.37 1.37	\$62, 80 62, 40 60, 74 60, 04 58, 09 61, 30 65, 51 62, 78 60, 61 55, 03 56, 25 60, 28 62, 22	43. 1 41. 3 30. 1 35. 5 35. 6 39. 4 41. 1	1. 60 1. 59 1. 58 1. 57 1. 58 1. 52 1. 52 1. 55 1. 55 1. 55 1. 53 1. 54	48. 81 44. 78 45. 14 43. 90 45. 80 45. 88 46. 88 46. 7, 70 47. 70 48. 13 49. 00 49. 01 49. 77	36. 2 35. 8 36. 4 35. 4 36. 0 36. 4 37. 0 37. 5 37. 6 38. 5 39. 2 38. 9 39. 5	1, 27 1, 26 1, 24 1, 24 1, 25 1, 26 1, 26 1, 25 1, 25 1, 25 1, 25 1, 25 1, 25 1, 26 1, 26	48. 26 44. 13 44. 39 43. 65 44. 50 45. 51 46. 25 46. 25 46. 38 48. 63 48. 38 49. 25	36. 8 35. 8 35. 8 36. 7 37. 3 36. 9 37. 3 36. 9 37. 3 36. 9 37. 3 38. 9 38. 7	1. 37 1. 28 1. 34 1. 24 1. 28 1. 24 1. 26 1. 26 1. 25 1. 25 1. 25
	77	bread mi		Broad	woven mills •	fabrie			C	latton, s	ak, synti	hetic Abe	,			Woole	n and w	rated
					mills •		Un	ited Sta	tes		North			South				
1982: Average 1983: Average 1984: February March April May June July August September October November December 956: January February	\$49, 79 49, 53 46, 36 48, 89 45, 47 47, 63 48, 01 49, 28 49, 02 44, 80 47, 74 50, 82 51, 21 82, 13	39.7 39.7	\$1. 29 1. 27 1. 27 1. 27 1. 27 1. 27 1. 27 1. 27 1. 28 1. 28 1. 28 1. 28 1. 28 1. 29 1. 30	\$51, 90 82, 90 80, 03 80, 16 48, 73 48, 97 49, 52 50, 69 51, 08 52, 14 53, 20 53, 50 52, 67 82, 93	38. 8 39. 4 37. 9 38. 0 37. 2 37. 1 37. 6 38. 4 38. 7 39. 5 40. 6 39. 9 40. 1	\$1. 34 1. 32 1. 33 1. 31 1. 32 1. 31 1. 32 1. 32 1. 32 1. 32 1. 32 1. 32	\$49. 79 51. 69 48. 76 48. 76 47. 36 47. 34 47. 49 47. 87 49. 15 49. 54 50. 26 52. 26 52. 52 51. 34 51. 87	38. 6 39. 3 37. 8 37. 0 36. 7 37. 1 38. 1 38. 4 39. 8 40. 4 39. 8 30. 9	\$1, 29 1, 30 1, 29 1, 28 1, 29 1, 28 1, 29 1, 29 1, 29 1, 30 1, 30 1, 30	\$88. 25 86. 37 84. 14 84. 43 83. 44 83. 72 84. 53 84. 54 85. 81 85. 81 87. 77 88. 06 67. 51 87. 37	38. 1 39. 7 38. 4 38. 6 37. 9 38. 1 38. 4 38. 7 39. 0 39. 3 40. 6 40. 5 40. 4	\$1, 45 1, 42 1, 41 1, 41 1, 41 1, 42 1, 43 1, 43 1, 43 1, 42 1, 43	\$48, 78 49, 78 47, 50 47, 50 46, 00 45, 86 46, 13 46, 50 47, 88 48, 26 50, 17 81, 06 51, 31 50, 42 80, 58	38, 7 39, 2 37, 7 36, 8 36, 4 36, 9 37, 2 38, 0 38, 3 39, 5 40, 2 40, 4 39, 7 39, 8	\$1. 26 1. 27 1. 28 1. 25 1. 25 1. 25 1. 25 1. 25 1. 27 1. 27 1. 27	\$62. 56 61. 98 50. 36 50. 21 60. 06 62. 16 62. 08 60. 65 60. 55 61. 41 60. 90 61. 84 62. 67 61. 31 61. 65	40. 1 39. 7 38. 8 38. 7 39. 0 40. 1 40. 1 40. 4 40. 0 46. 7 41. 8 42. 0 41. 1	81. 84 1. 85 1. 83 1. 84 1. 84 1. 84 1. 82 1. 81 1. 82 1. 82 1. 82 1. 82 1. 82
	Nacro	w fabric	e and	Knit	ting mf	tie *				Full-fa	shioned i	hosiery				Sean	niess kos	iery
	921	nall war					Uni	ted Sta			North			South		Un	Ited Sia	Les
1982: Average 1983: Average 1984: February March April May July August September Octaber November 1985: January February	\$54, 27 54, 53 64, 79 84, 65 53, 96 54, 65 54, 23 53, 66 64, 39 84, 60 55, 30 65, 74 56, (31	40. 2 39. 8 39. 7 39. 6 39. 1 39. 6 39. 3 38. 9 39. 4 39. 7 39. 0 39. 5 40. 1 30. 8	\$1. 38 1. 37 1. 38 1. 38 1. 38 1. 38 1. 38 1. 37 1. 40 1. 40 1. 39 1. 39	\$49. 02 48. 75 48. 84 48. 71 46. 99 47. 65 48. 34 47. 58 49. 13 50. 17 50. 82 50. 82 50. 82 50. 81	38. 3 37. 5 37. 0 36. 9 35. 6 36. 1 36. 9 36. 6 37. 5 38. 3 38. 5 38. 3 37. 4	\$1, 28 1, 30 1, 32 1, 32 1, 32 1, 31 1, 30 1, 30 1, 31 1, 31 1, 32 1, 32 1, 32 1, 32	\$67. 61 56. 70 87. 76 87. 78 87. 83 84. 53 86. 12 54. 00 82. 46 54. 31 54. 96 87. 79 87. 92 56. 42 56. 02	37. 9 37. 3 38. 3 38. 3 38. 3 36. 6 36. 5 36. 8 37. 2 37. 9 38. 9 39. 4 39. 4	\$1. 52 1. 52 1. 50 1. 51 1. 49 1. 51 1. 49 1. 48 1. 48 1. 45 1. 45 1. 47 1. 47	\$57,00 57,00 57,96 58,83 58,83 54,87 54,96 54,96 54,96 54,24 53,00 56,45 57,18 55,20 56,77	37. 5 38. 4 38. 2 34. 9 36. 1 36. 3 36. 1 36. 3 36. 3 36. 3 38. 4 38. 9 37. 3	\$1. A2 1. 52 1. 51 1. 54 1. 51 1. 51 1. 47 1. 47 1. 47 1. 48	\$56, 24 87, 37 87, 07 86, 02 55, 20 53, 58 51, 63 54, 64 56, 12 56, 84 58, 36 56, 79	38, 2 37, 0 38, 3 38, 3 37, 6 36, 9 36, 2 37, 3 38, 7 39, 2 39, 7 38, 9	\$1. 52 1. 52 1. 49 1. 49 1. 50 1. 48 1. 46 1. 45 1. 45 1. 45 1. 45	\$46, 39 40, 36 60, 32 39, 87 39, 31 40, 63 39, 74 41, 78 41, 58 41, 58 43, 69 43, 10 42, 11 43, 17	37. 4 36. 6 35. 6 33. 9 35. 1 36. 6 35. 8 37. 3 38. 3 37. 8 36. 3	\$1.08 1.10 1.19 1.19 1.19 1.19 1.11 1.11 1.11

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									facturin									
		Seamle	se Aneler	y-Can	tinued		7	extile-m	till prod	ueta-C	Continue	*d				Produ		-1-61-
Year and month	-	North			South		Kn	it outern	tear	Kni	t unders	rear	Dyeans	and fir textiles	naneng.	textile	oud fi a (except	wood)
	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. corn- ings	Avg. wkiy. earn- ings	Avg. wkly, hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1962: Average 1963: Average 1964: Pebruary Mareli April May June July August Reptember October November December 1955: January Vebruary	\$43.62 43.89 42.72 43.32 30.63 42.72 44.25 43.88 44.45 43.52 44.72 44.72 44.3.32 43.32 43.56	38. 6 37. 4 36. 6 36. 1 33. 3 36. 2 37. 5 38. 0 37. 5 38. 0 37. 5 36. 5 36. 1 36. 0	\$1. 13 1. 17 1. 20 1. 30 1. 19 1. 18 1. 18 1. 17 1. 17 1. 18 1. 18 1. 18 1. 19 1. 20 1. 21	\$29. 33 30. 31 30. 71 39. 53 37. 74 38. 85 40. 15 39. 05 41. 29 41. 10 43. 39 41. 75 42. 83 41. 75 42. 92	87. 1 36. 4 36. 1 85. 6 34. 0 35. 3 87. 2 36. 7 38. 4 37. 9 36. 3 37. 0	\$1.06 1.06 1.10 1.11 1.11 1.11 1.10 1.10	82.03 82.72 83.65 53.38 54.00 52.36 51.10	37. 7 38. 2 38. 6 38. 4 38. 3 37. 4 36. 5	\$1. 26 1. 33 1. 40 1. 39 1. 30 1. 41 1. 38 1. 38 1. 39 1. 41 1. 40 1. 40	45. 87	37.6	\$1. 18 1. 20 1. 21 1. 22 1. 21 1. 22 1. 21 1. 22 1. 21 1. 22 1. 23 1. 23 1. 23	59. 55 59. 90 60. 00 61. 16 61. 31 62. 67 65. 18 66. 22 64. 72	42.3	\$1, 49 1, 50 1, 52 1, 82 1, 80 1, 80 1, 50 1, 51 1, 51 1, 51 1, 53 1, 54 1, 53 1, 53	89, 64 59, 60 60, 90 61, 06 62, 55 65, 06 66, 10 64, 60	40. 3 40. 0 40. 6 40. 7 41. 7 42. 8 43. 2	\$1. 40 1. 55 1. 55 1. 40 1. 40 1. 40 1. 50 1. 50
	Carpet	is, rugs, coveriz	other	Wool	carpels, carpel y	rups, ara	Hats and	(except milline	rioth ry)	Miscel	ianeous goods i	textile	Fell woren	goods (es felts and	rcept i hate)	L	ace good	
1983: Average. 1985: Average. 1985: Average. 1986: February. March April. May June. July August Reptember. October November. December. 1986: January February.	68. 39 70. 88 69. 83 69. 72 67. 94 68. 38 68. 38 69. 13 71. 63 72. 60 72. 60 72. 66 71. 34	41. 2 40. 8 30. 9 40. 3 39. 5 39. 3 39. 5 40. 7 41. 4 41. 3 41. 3 41. 3	\$1.66 1.73 1.73 1.73 1.74 1.74 1.76 1.76 1.78 1.78 1.74 1.74	\$65. 74 69. 68 66. 99 67. 69 65. 26 65. 19 65. 57 67. 99 69. 65 67. 84 69. 20 70. 30 70. 12	39. 6 39. 7 38. 5 38. 3 37. 9 38. 3 37. 9 39. 3 39. 8 39. 8 40. 0 40. 4	\$1.66 1.74 1.74 1.73 1.72 1.73 1.73 1.73 1.73 1.75 1.75 1.71 1.74	54.60	37. 2 37. 4 36. 2 35. 4 31. 8 35. 4 36. 4 36. 4 36. 4 37. 3 39. 2 37. 2 38. 5	\$1. 43 1. 51 1. 50 1. 45 1. 48 1. 51 1. 56 1. 50 1. 34 1. 54 1. 55 1. 55 1. 55	\$40.09 62.49 62.40 61.91 60.69 61.23 61.69 61.70 61.85 62.56 62.56 63.89 65.10 66.78	40. 6 40. 8 40. 9 40. 2 39. 4 39. 5 39. 8 39. 9 40. 1 40. 8 41. 7 41. 2 42. 0	\$3, 48 1, 63 1, 54 1, 55 1, 55 1, 57 1, 56 1, 56 1, 56 1, 56 1, 56 1, 56 1, 58 1, 58 1, 58 1, 58	69, 83 69, 25 70, 45 71, 81 71, 98 72, 16 70, 70	40. 3 41. 3 30. 2 40. 1 39. 8 38. 4 40. 8 59. 9 39. 8 40. 9 41. 0 40. 4	\$1. 68 1. 72 1. 73 1. 70 1. 72 1. 73 1. 74 1. 76 1. 76 1. 76 1. 76	\$57.07 61.85 59.84 60.59 88.81 57.96 60.31 60.39 61.58 62.54 61.38 62.05 64.62 62.32 64.08	38. 3 38. 9 37. 4 36. 3 36. 0 37. 0 36. 6 37. 3 37. 2 38. 3 30. 4 38. 0 38. 6	\$1. 49 1. 56 1. 60 1. 62 1. 63 1. 65 1. 65 1. 65 1. 65 1. 64 1. 64
				т	ertile-m	ill prod	uets-C	ontinue	d				Appar	el and o	ther fin	ished to	stile pro	duets
	Paddin	go and rry fillin	uphoi-	Process	sed was sered fib	te and	cloth	iai leath and d fubrics	other	Cords	spr and (wine	Total: other tile p	Appare finishe products	d tex-		d bas e'	
1982 Average. 1983: Average. 1984: February. March. April May June. July August September October November December 1985: January February	\$64. 17 65. 19 65. 51 67. 66 66. 66 60. 14 64. 71 67. 60 67. 60 67. 70 70. 73 75. 41 72. 76 77. 65	41. 4 41. 0 39. 7 41. 0 40. 4 41. 4 39. 7 40. 0 39. 8 38. 8 38. 9 41. 2 42. 1 44. 1 42. 8 44. 0	\$1. 85 1. 59 1. 65 1. 65 1. 65 1. 63 1. 69 1. 65 1. 65 1. 68 1. 71 1. 70 1. 73	\$51, 24 \$1, 30 49, 73 80, 51 80, 02 51, 73 81, 29 \$2, 03 \$0, 68 \$1, 83 \$2, 08 \$2, 58 \$3, 20 \$3, 20 \$2, 58	42. 7 42. 4 41. 1 41. 4 41. 0 42. 4 41. 7 42. 3 41. 8 42. 0 42. 9 42. 9 42. 9	\$1, 20 1, 21 1, 21 1, 22 1, 22 1, 23 1, 23 1, 24 1, 24 1, 24 1, 24 1, 24 1, 24	\$75. 88 80. 10 79. 53 77. 29 76. 93 77. 59 79. 61 74. 03 76. 32 81. 33 81. 84. 52 86. 10 86. 71 88. 70	44. 2 44. 5 43. 7 42. 5 42. 4 43. 5 40. 9 42. 4 44. 2 45. 8 45. 4 46. 2	\$1. 71 1. 89 1. 82 1. 81 1. 83 1. 83 1. 83 1. 84 1. 86 1. 86 1. 87 1. 88	\$53, 66 53, 33 53, 18 53, 84 51, 41 52, 20 52, 88 53, 54 53, 54 52, 61 63, 70 53, 96 55, 20	39. 6 39. 5 39. 1 39. 3 37. 8 38. 1 38. 0 39. 7 30. 2 38. 8 39. 7 30. 2 38. 8 39. 1 40. 0	\$1. 34 1. 35 1. 36 1. 37 1. 37 1. 37 1. 37 1. 38 1. 37 1. 38 1. 38	\$47, 58 48, 41 49, 46 49, 59 45, 62 46, 07 46, 55 47, 17 48, 87 48, 82 47, 84 48, 37 49, 01 48, 60 49, 82	36. 6 36. 4 36. 1 36. 2 34. 9 35. 2 35. 9 35. 9 35. 1 36. 0 36. 0 36. 9	\$1. 30 1. 33 1. 37 1. 37 1. 33 1. 32 1. 33 1. 34 1. 35 1. 34 1. 35 1. 35 1. 35	\$32. 15 57. 93 57. 95 57. 95 57. 32 52. 64 52. 97 55. 08 56. 90 87. 35 53. 63 55. 09 58. 32 57. 87 89. 29	36, 9 36, 9 36, 0 35, 6 32, 9 34, 9 35, 5 35, 4 32, 9 35, 5 35, 6 35, 4 32, 9 35, 5 35, 6	\$1, 40 1, 87 1, 61 1, 61 1, 61 1, 62 1, 63 1, 62 1, 63 1, 62 1, 63
	Men's furni work	and shings ciothin	boys'	Shirta	collars ightwear	and	Sepa	rate tros	laere	H	'erk skir	to .	Women	's outer	wear '	Won	nen's dre	***
1962: Average. 1963: Average. 1964: February. March April May June. July August September October November December January February	\$40. 80 41. 18 41. 29 41. 15 39. 67 40. 00 39. 76 41. 70 41. 84 41. 58 41. 61 40. 91 40. 68 42. 41	37, 8 37, 1 38, 9 38, 1 34, 8 35, 5 36, 9 36, 8 36, 2 36, 2 36, 2 37, 2	\$1. 05 1. 11 3. 15 1. 14 1. 13 1. 14 1. 13 1. 12 1. 13 1. 14 1. 13 1. 14 1. 13 1. 14	\$39. 96 41, 40 41, 53 41, 80 39, 23 39, 67 39, 55 41, 47 42, 75 43, 82 42, 41 41, 61 41, 61	37. 0 37. 3 36. 1 36. 4 34. 8 34. 8 35. 0 36. 7 36. 9 37. 5 38. 1 37. 4	\$1. 08 1, 11 1. 15 1. 14 1. 14 1. 13 1. 13 1. 13 1. 15 1. 14 1. 14	\$42, 96 44, 63 46, 12 45, 87 42, 73 41, 41 40, 83 41, 77 43, 32 43, 44 42, 13 42, 36 43, 56 43, 19 45, 22	37. 6 37. 8 37. 8 35. 6 34. 8 34. 6 35. 7 36. 5 36. 6 38. 0 38. 0	\$1. 14 1. 19 1. 22 1. 22 1. 20 1. 19 1. 18 1. 17 1. 20 1. 19 1. 18 1. 19 1. 19	\$38, 15 34, 32 34, 24 83, 79 34, 20 34, 20 34, 20 36, 65 32, 59 33, 12 33, 25 33, 12 33, 31	37. 8 36. 9 35. 3 36. 9 36. 0 36. 6 35. 5 37. 0 35. 2 36. 8 34. 3 34. 5 35. 4	\$0. 93 . 93 . 97 . 98 . 98 . 98 . 93 . 94 . 94 . 95 . 94	\$82, 39 82, 65 84, 62 84, 63 49, 61 49, 76 48, 53 50, 81 63, 18 82, 17 80, 40 81, 65 83, 88 53, 40 81, 65 83, 88	35, 4 35, 1 35, 7 35, 9 33, 8 44, 8 33, 7 34, 1 35, 2 34, 9 35, 7 35, 6 36, 2	\$1. 46 1, 50 1, 53 1, 43 1, 43 1, 44 1, 49 1, 81 1, 53 1, 50 1, 50 1, 50	\$51. 48 52. 15 58. 25 55. 18 52. 25 53. 45 47. 91 48. 67 52. 66 52. 05 52. 05 52. 80 53. 70 53. 28	\$5. 5 \$5. 0 \$5. 6 \$6. 3 \$4. 6 \$3. 5 \$3. 8 \$5. 0 \$5. 9 \$5. 0 \$5. 8 \$5. 0 \$5. 8	\$1. 48 1. 80 1. 80 1. 81 1. 51 1. 41 1. 48 1. 88 1. 84 1. 80 1. 40 1. 40

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									Manu	heturin	g-Con	tinued							
							Appe	arel and	other fi	nished t	iextile p	roducts	-Conti	inned					
Year an	nd month	Hous	ekold ap	parel	Wome	n's suits and skirt	coats,	Wom dren's	en's and underga	ehil- ments		weer and		Cire	ds and d	illed	,	Milliner	,
		Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. carn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1953: Ave 1954: Feb Mar Apri May Jun July Aug Sept Oct Nov Deo	7	\$30, 98 39, 74 40, 26 41, 18 40, 04 39, 79 38, 86 37, 66 30, 96 40, 18 41, 63 40, 70 39, 38 30, 93	87. 7 36. 8 36. 6 37. 1 36. 4 36. 5 34. 7 35. 2 36. 0 36. 3 37. 5 37. 0 36. 3	1. 11 1. 11 1. 11 1. 10	864. 94 64. 81 67. 94 65. 47 81. 43 81. 44 60. 59 66. 44 66. 92 63. 60 90. 87 67. 42 67. 86	31. 8 29. 7 30. 9 33. 8 34. 4	\$1.95 1.97 2.01 1.90 1.87 1.78 1.87 1.96 2.00 2.00 1.97 1.96 1.96	45, 50 45, 51 43, 92	34. 9 35. 5 35. 7 35. 2 36. 2 36. 9 37. 6 37. 3 36. 3	1. 21 1. 21 1. 21 1. 23 1. 21	\$41. 03 41. 58 41. 63 41. 95 39. 79 40. 14 40. 24 39. 78 41. 03 41. 92 43. 06 43. 09 41. 62 40. 68 41. 81	36, 8 34, 9 35, 3 35, 3 36, 3 37, 1 38, 1 38, 1 36, 3	1. 18 1. 14 1. 13 1. 13	48. 56 49. 18 49. 28 48. 78	38. 1 87. 0 35. 8 36. 3 36. 4 36. 4 36. 2 35. 3 36. 7 36. 8 36. 8 36. 8 36. 8	1.33 1.33 1.34 1.36 1.36	\$58. 60 58. 64 67. 09 67. 30 44. 60 44. 60 52. 33 55. 71 62. 58 64. 51 80. 13 81. 90 63. 50 63. 50	36.5	\$1. d1 1. 62 1. 69 1. 60 1. 60 1. 61 1. 61 1. 62 1. 54 1. 54 1. 54
200		C	hildren	'•	M	scellane parel as ccessorie	ous	Oth	er fabric ile prodi	nted	and	ins, dra other ho urwishin	MAR.	7	extile ba	go.	Cen	nus prod	uels
1988: Ave 1964: Febb Mar Apri Mar July Aug Sept Oct Nav Deo 1988: Janu	rust tember tober veinber uury	\$43. 52 44. 41 47. 13 46. 63 42. 11 44. 29 45. 38 45. 36 46. 62 45. 26 44. 16 44. 77 43. 92 45. 00	37, 2 37, 9 36, 5 36, 2 37, 0 36, 3 37, 1	1. 21 1. 22 1. 23 1. 23 1. 24 1. 22 1. 21 1. 21	\$43, 15 44, 25 43, 92 43, 80 40, 92 43, 19 42, 59 42, 19 43, 92 44, 77 45, 38 45, 51 45, 13 43, 32 44, 04	36. 6 36. 2 34. 1 35. 4 35. 2 36. 3 36. 3 36. 7 37. 3 37. 3	1. 21	47. 60 48. 70 47. 47 47. 23 46. 85 48. 00 48. 76 49. 02 49. 79 50. 18	36. 2 36. 9 36. 8 36. 9 36. 9 37. 5 37. 8 38. 6 38. 6	1. 28 1. 28 1. 29 1. 28 1. 29 1. 30	42. 60 41. 64 41. 40 41. 41 41. 29 42. 78 44. 58 45. 34 45. 75 45. 31	36. 9 36. 0 35. 7 38. 7 38. 1 39. 0 39. 1 38. 4 36. 5	1. 15 1. 17 1. 16 1. 17 1. 18 1. 18	48. 78 49. 71 49. 95 50. 79 53. 18 54. 26 51. 71 52. 38 62. 22	38. 7 38. 2 36. 2 87. 5 86. 4 87. 1 87. 0 37. 0 38. 3 38. 6 38. 4 37. 7	1. 36 1. 35 1. 35 1. 35 1. 36	\$49, 88 51, 09 50, 25 80, 76 61, 84 63, 33 83, 19 62, 26 56, 58 62, 50 61, 84 82, 67 50, 53, 19	39. 8 39. 0 39. 7 38. 6 38. 4 39. 6 38. 6	\$1, 25 1, 31 1, 34 1, 35 1, 35 1, 35 1, 33 1, 34 1, 40 1, 36 1, 33 1, 33 1, 34 1, 35 1, 35 1, 35 1, 36 1, 36
Feb	ruary	46.00	31.4	1, 23		80. 1	1, 21						raiture)						
		Total	Lumb	er and	Loggi	ng camp	ns and	Bawn	nille and	plan-			Bourn	ills and	planing	mills, g	eneral		
		ceb	produc t furnit	ure)	0	ontracto	rs	i	ng milis		Un	alted Sta	ates		Bouth			West	
1954: Feb Mai Apr Mai Jun July Aug Sep Oct Nov 1958: Janu	10	963. 86 65. 63. 76 64. 40 65. 98 67. 03 68. 71 65. 87 70. 14 68. 64 66. 91 66. 75 66. 75	40. 9 40. 8 41. 8 40. 4 41. 8 41. 1	1. 61 1. 64 1. 65 1. 68 1. 55 1. 58 1. 67 1. 69 1. 67	73. 92 72. 96 80. 30 76. 80 79. 18	30, 3 30, 4 39, 2 37, 5 38, 9 36, 5 39, 3 39, 3 38, 7 39, 8	1. 68 1. 73 1. 92 1. 96 1. 96 1. 96	63, 92 64, 96 65, 77 67, 23 68, 80 64, 64 67, 10 70, 81 70, 81 68, 89 66, 67	40. 2 40. 6 40. 6 40. 8 41. 2 41. 7 41. 9 41. 9 41. 9 40. 9	1. 66 1. 63 1. 64	64. 32 65. 37 66. 34 67. 64 68. 21 67. 68 70. 47 71. 40 69. 31 67. 08 67. 16	40, 2 40, 6 40, 7 40, 8 41, 8 41, 7 41, 8 41, 8 41, 7 41, 8 41, 8	1. 60 1. 61 1. 63 1. 67 1. 68 1. 56 1. 90 1. 69 1. 70 1. 67 1. 64 1. 65	43, 87 43, 26 43, 26 44, 20 45, 15 45, 57 45, 69 46, 11 45, 36 46, 47 43, 99	42.5 43.0 43.4 43.5 43.5 43.2 43.3	1. 03 1. 04 1. 04 1. 05 1. 05 1. 06 1. 06 1. 08 1. 05	86, 69 86, 19 86, 19 86, 94 86, 94	39, 3 39, 1 20, 8 38, 6 40, 1 39, 0 40, 2 39, 7 38, 8	2. 16 2. 16 2. 10 2. 12 2. 17 2. 18 2. 22 2. 23 2. 20 2. 19 2. 10 2. 10 2. 10
		atru	ork, ply prefabri etural v products	rood		Millwor			Pipuso		Wood	en cont	siners *	W. orke	oden ba r than c	igar	wee	scellane od prode	ous
1953: A ve 1954: Feb Ma Apr Ma Jun Julj Ang Sep Oct No Dec 1955: Jan	rtl	\$66, 94 68, 89 69, 19 68, 54 68, 78 69, 77 71, 90 69, 77 71, 99 71, 28 74, 12 73, 43 73, 78 72, 73 71, 86	42.1 41.8 40.7 40.8 40.7 40.8 41.8 42.6 42.6 42.4 41.8	\$1. 59 1. 66 1. 70 1. 68 1. 69 1. 71 1. 72 1. 68 1. 69 1. 73 1. 74 1. 74 1. 74	68, 47 68, 47 67, 73 69, 55 71, 96 70, 90 72, 84 72, 85 73, 96 72, 90	41. 0 41. 0 40. 8 41. 4 42. 6 42. 2 43. 1 42. 6 43. 0 42. 4 41. 2	1. 64 1. 67 1. 67 1. 66 1. 68 1. 60 1. 71 1. 72 1. 72 1. 71	73. 22 71. 31 71. 62 71. 10 71. 81 66, 50 68, 66 71. 81 76, 71 78, 69	42.3 42.1 41.7 40.4 40.8 40.8 40.8 43.3 43.1 44.5 64.5	1. 73 1. 76 1. 76 1. 63 1. 62 1. 76 1. 79 1. 78 1. 78	49, 20 49, 97 51, 16 49, 48 48, 98 50, 82 51, 83 50, 50 50, 54 49, 23	39, 7 30, 9 40, 6 39, 6 39, 6 39, 6 40, 4 40, 1 39, 7 40, 8 40, 1 39, 7 40, 8	1. 23 1. 28 1. 28 1. 24 1. 26 1. 24 1. 24 1. 27 1. 28 1. 27 1. 28 1. 27	47, 95 49, 20 49, 48 49, 85 51, 56 49, 20 47, 95 50, 43 51, 56 50, 38 49, 20	40.3	1. 22 1. 23 1. 24 1. 27 1. 23 1. 23 1. 27 1. 27 1. 21	54. 68 55. 08 53. 07 54. 13 56. 17 86. 72 87. 13	60.7 60.8 60.8 30.0 60.7 60.7 61.1	1, 36 1, 36 1, 36

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1-Continued

									Manu	fecturin	g-Con	tinued							
								1			and fist	ures					0.00		- h
Ye	ear and month	Tota	d: Furn d fixtur	iture res	ft	ousebol irniture	4		househore (exceptered)			od Aouse ure, uph		Ma	utresses edspring	and pr	Office, ing.	and al furnit	e-build profee ture f
		Avg. wkly. earn- ings	Avg. wkly. bours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly, hours	Avg. hriy. carn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1964:		\$61. 01 63. 14 62. 16 62. 16 61. 00 60. 53 62. 17 62. 02 63. 74 64. 46 65. 10 64. 62 65. 83 63. 90 65. 83	40.9	1. 87 1. 88 1. 88 1. 58	87. 20 89. 19 89. 04 61. 00 61. 71 62. 02 62. 17 63. 19 60. 85	41. 5 40. 8 39. 8 39. 9 38. 8 38. 2 39. 2 40. 4 40. 6 41. 2 40. 3 41. 3	\$1. 42 1. 48 1. 49 1. 50 1. 50 1. 51 1. 51 1. 51 1. 82 1. 82 1. 53 1. 51	54, 54 52, 92 52, 52 54, 26 52, 92 54, 81 55, 08 56, 44 56, 44 87, 27 56, 17	41. 7 41. 2 40. 4 40. 4 39. 2 38. 9 39. 9 30. 2 40. 6 41. 5 41. 5 41. 8 41. 3 41. 9	\$1. 28 1. 34 1. 35 1. 35 1. 35 1. 35 1. 36 1. 36 1. 36 1. 36 1. 36 1. 36	65. 27 77. 49 66. 89 69. 14 70. 98 62. 43	41. 4 40. 4 88. 9 39. 0 37. 9 36. 1 37. 5 38. 1 39. 8 40. 9 41. 5 41. 5 42. 0 38. 3 40. 8	\$1. 56 1. 62 1. 63 1. 64 1. 62 1. 63 1. 64 1. 65 1. 66 1. 67 1. 63 1. 63	\$64. 87 66. 20 66. 30 65. 97 64. 30 65. 63 67. 70 69. 38 80 97 88. 95 66. 19 66. 19 69. 72 70. 52	40.8 39.9 89.7 30.5 36.5 38.3 40.3 41.4 40.8 39.7 40.3 41.0	\$1. 80 1. 67 1. 67 1. 67 1. 66 1. 68 1. 68 1. 69 1. 68 1. 73 1. 72	74. 27 73. 04	40. 9 41. 0 40. 1 40. 3 40. 5 41. 9 41. 8 41. 7 41. 1 42. 2 41. 5	1. 70 1. 70 1. 70 1. 70 1. 70
		-			Fu	rniture	and fix	tures ('ontinu	ed					Paper	and at	lied pro	ducts	
		Wood	office fur	niture	Metal	office fur	niture		ons, she i, and fi			s, blind elianeou re and fi		Total	i: Paper d produ	and	Pulp	, paper, rboard	and nills
1942: 1943: 1984:	A verage February March April May May June July August Beptember October November December January	\$00. 86 61. 71 89. 55 59. 10 86. 17 87. 75 58. 80 58. 84 61. 69 60. 49 60. 49 60. 59 60. 50	41. 4 40. 6 39. 7 39. 4 37. 2 38. 5 39. 2 40. 3 41. 0 40. 6 38. 8 40. 6 60. 3	\$1. 47 1. 52 1. 50 1. 81 1. 50 1. 86 1. 46 1. 49 1. 50 1. 80 1. 49	\$72. 80 75. 70 77. 30 77. 71 76. 98 75. 60 77. 14 78. 64 77. 39 78. 36 79. 32 80. 70 80. 90 82. 64	41. 6 40. 7 40. 9 40. 2 40. 0 40. 6 30. 6 40. 6 40. 8 41. 1 41. 6 41. 7 42. 6	\$1. 78 1. 86 1. 86 1. 89 1. 90 1. 89 1. 90 1. 91 1. 93 1. 93 1. 94 1. 94	\$71. 17 73. 85 73. 90 73. 05 72. 66 73. 84 75. 14 73. 90 75. 05 77. 39 76. 78 76. 78 77. 75	40. 9 40. 8 40. 0 79. 7 39. 5 39. 7 40. 4 39. 5 40. 1 39. 5 40. 1 40. 6	\$1. 74 1. 81 1. 84 1. 86 1. 86 1. 86 1. 86 1. 86 1. 90 1. 90 1. 92 1. 92 1. 92 1. 89 1. 80	\$57. 60 62.31 02.88 62.88 62.42 64.48 64.74 64.90 64.80 68.00 68.41 64.78 68.16 65.19 60.24	41. 5 42. 11 41. 1 40. 9 40. 8 41. 6 41. 5 41. 6 41. 3 41. 4 41. 4 41. 0 42. 5 41. 0	\$1. 39 1. 48 1. 53 1. 63 1. 63 1. 56 1. 56 1. 56 1. 57 1. 87 1. 88 1. 60 1. 59 1. 60	\$68. 01 72. 67 72. 07 72. 83 71. 55 72. 83 74. 62 74. 62 76. 01 76. 18 76. 01 75. 72 75. 65	42.8 43.0 41.9 42.1 41.6 42.4 42.4 42.6 42.5 42.7 42.8 42.7 42.8	\$1. 61 1. 66 1. 72 1. 73 1. 72 1. 73 1. 75 1. 76 1. 76 1. 77 1. 78 1. 78 1. 78 1. 78	\$73. 68 78. 76 78. 37 78. 99 77. 47 78. 10 79. 79 81. 10 81. 97 82. 16 81. 91 82. 34 82. 24 82. 34	43. 6 44. 3 43. 4 42. 8 43. 6 43. 6 43. 6 43. 6 43. 7 43. 8 43. 7 43. 8	\$1. 66 1. 79 1. 81 1. 82 1. 83 1. 86 1. 88 1. 88 1. 88 1. 88 1. 88
	February	60. 49	40. 0	1. 40	-			oducts-		- 1	100.24	41.4	1.00		-		and all		
		Pape	rboard b	enn- oges •	Pape	rboard b	eres		cans, fu d drum		Other	r paper i	and ets	Total publicalited	: Prin	ting, and	N	ewspape	***
1984	A verage A verage February Mareh April May June July August September October November January February	\$64. 46 67. 66. 69. 66. 75 66. 33 67. 89 69. 14 69. 05 70. 96 71. 23 71. 83 70. 22 69. 70 70. 38	42. 4 43. 3 40. 3 40. 7 40. 9 41. 4 42. 0 42. 4 42. 5 41. 8 41. 0 41. 4	\$1. 52 1. 90 1. 64 1. 64 1. 65 1. 67 1. 68 1. 69 1. 69 1. 69 1. 70 1. 70	\$64. 18 67. 42 65. 69 66. 34 67. 65 69. 06 68. 39 67. 65 69. 06 68. 39 70. 47 71. 14 71. 74 69. m 70. 14	42. 5 42. 4 40. 3 40. 7 41. 0 41. 6 41. 2 42. 2 42. 6 42. 7 41. 1 41. 5	\$1. 51 1. 59 1. 63 1. 63 1. 64 1. 65 1. 66 1. 67 1. 67 1. 67 1. 67 1. 69 1. 69 1. 69	\$66. 01 71. 65 71. 66 71. 66 71. 20 71. 82 72. 47 74. 21 74. 21 74. 80 72. 71 78. 82 74. 80 72. 74. 96 74. 19	41. 0 41. 9 40. 5 40. 6 39. 9 39. 6 39. 9 39. 8 39. 2 40. 0 39. 3 40. 6 40. 3 40. 6	\$1. 61 1. 71 1. 77 1. 77 1. 78 1. 80 1. 83 1. 85 1. 90 1. 87 1. 85 1. 86 1. 86 1. 85	\$62, 40 65, 31 65, 85 66, 01 66, 37 66, 42 66, 83 66, 83 66, 67 67, 65 68, 23 67, 73 67, 89	41. 6 41. 6 40. 9 41. 0 41. 0 41. 0 41. 0 41. 0 41. 0 41. 0 41. 0 41. 0 41. 0	\$1. 50 1. 57 1. 61 1. 61 1. 62 1. 63 1. 63 1. 63 1. 65 1. 66 1. 66 1. 66	85. 56 81. 95. 56 85. 85. 86. 11 86. 71 86. 94 86. 94 86. 94 88. 30 87. 94 88. 95 88. 95	38. 8 58. 9 38. 2 38. 3 38. 3 38. 3 38. 3 38. 3 38. 5 38. 6 38. 4 38. 5 38. 6 38. 4 38. 5	\$2. 10 2. 20 2. 25 2. 25 2. 27 2. 27 2. 27 2. 27 2. 27 2. 29 2. 20 2. 30 2. 31 2. 33	\$87. 12 91. 22 90. 42 90. 68 92. 26 93. 86 93. 50 92. 01 91. 85 94. 32 94. 32 94. 32 94. 52 94. 32 95. 52 97. 52 93. 27	36. 3 36. 2 35. 6 35. 6 36. 1 36. 1 35. 6 36. 0 36. 0 36. 0 36. 8 35. 2 35. 6	\$2. 40 2. 52 2. 84 2. 84 2. 84 2. 80 2. 89 2. 83 2. 63 2. 62 2. 62 2. 62 2. 62
		Pe	riodical		1	Books		Comme	retal pri	inting	Lith	egraphi	ng	Gree	ting car	ds	Book	hinding d indus	and tries
1964:	A verage A verage February Mareh April May June July A ugust September October November January February	\$83. 60 96. 98 90. 27 88. 58 96. 63 86. 14 86. 63 87. 63 87. 63 89. 95 89. 95 89. 85 88. 82 87. 76 90. 68	60. 0 39. 9 40. 3 39. 2 38. 8 38. 4 39. 1 30. 8 30. 8 30. 8 30. 5 30. 6	#2. (m) 2. 18- 2. 24 2. 22 2. 23 2. 23 23 23 23 23 23 23 23 23 23 23 23 23 2	\$71. 24 73. 84 73. 91 75. 91 75. 27 75. 66 75. 66 75. 66 78. 98 78. 18 76. 82 77. 22 78. 41 78. 80	39. 8 29. 7 38. 5 38. 5 38. 5 39. 2 39. 2 40. 3 39. 6 39. 6 30. 6 30. 1 39. 4	\$1. 79 1. 86 1. 90 1. 92 1. 92 1. 93 1. 93 1. 93 1. 94 1. 94 1. 98 1. 98 2. 00	\$80,00 84,42 84,50 85,57 84,80 84,46 85,02 86,70 86,29 86,29 86,29 86,29 86,29 86,36	40. 2 40. 2 39. 3 39. 6 39. 3 39. 1 39. 0 39. 4 39. 4 39. 4 30. 6 30. 8	\$1.99 2.10 2.15 2.15 2.16 2.18 2.17 2.16 2.18 2.19 2.20 2.20 2.21 2.21 2.22	\$81. 61 \$5. 26 \$4. 26 \$7. 05 \$4. 32 \$5. 97 \$8. 91 \$8. 05 \$8. 00 \$8. 00 \$8. 00 \$8. 00 \$8. 00 \$8. 00 \$8. 00 \$8. 00 \$8. 05 \$6. 58	40. 2 40. 6 39. 6 40. 3 39. 4 39. 8 40. 6 40. 7 40. 9 40. 0 30. 8 39. 0 39. 4	\$2.03 2.10 2.14 2.16 2.14 2.16 2.19 2.20 2.20 2.20 2.20 2.21 2.22 2.22 2.23	\$46. 84 48. 50 53. 10 53. 20 53. 20 53. 16 54. 05 51. 06 51. 06 51. 06 53. 34 82. 68 85. 91 56. 39 56. 39	38. 2 37. 6 38. 0 37. 7 87. 8 37. 7 37. 0 38. 3 36. 1 37. 9 39. 1 38. 0 38. 1	\$1. 20 1. 29 1. 20 1. 40 1. 41 1. 43 1. 38 1. 38 1. 40 1. 40 1. 30 1. 43 1. 43 1. 48 1. 48	\$62. 33 66. 30 66. 95 67. 82 66. 91 67. 64 68. 34 67. 60 67. 47 68. 38 69. 87 68. 29 67. 79	39. 2 39. 7 38. 7 30. 2 38. 9 39. 1 39. 5 30. 5 30. 5 30. 5 30. 5 30. 5 30. 5 30. 7 30. 7 38. 8 38. 8	\$1. 50 1. 67 1. 73 1. 73 1. 73 1. 73 1. 73 1. 73 1. 73 1. 73 1. 74 1. 75 1. 76 1. 76

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees '-Continued

								Manu	decturi	e-Con	thued							
	Printi and tries	ng, pub allied —Conti	itshing, indus- inued						Ch	emirals	and alli	nd prod	neta					
Year and month	lishi	lianeous ing and services		Total:	Chemie ed produ	als and acts	Indus	rial tno	organie	Alkal	es and a	Alorma	Indus	trini org	anie 1	Plasti	es, exem etic rubi	et syn -
	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly bours	Avg. briy.	Avg. wkly. mrn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1982: A verage 1953: A verage 1954: February March April May June July August Sentember October November December 1955: January February	#9#. 25 104. 15 103. 33 108. 79 102. 94 104. 13 103. 60 104. 49 105. 84 104. 99 105. 11 106. 77 107. 32 111. 35	38. 7 39. 7 38. 0 39. 0	2.69	\$70. 45 75. 56 76. 86 77. 27 77. 71 79. 10 79. 52 78. 69 79. 73 79. 70 79. 73 80. 34	41. 2 41. 3 41. 1 51. 1 41. 1 40. 9 41. 2 40. 9 41. 2 41. 2 41. 2 41. 2 41. 4 41. 1	1. 92 1. 94 1. 93	\$77. 08 82. 81 84. 46 85. 06 86. 06 86. 86 86. 88 86. 88 86. 88 87. 53 87. 53 87. 53 87. 53	41. 0 41. 2 40. 8 40. 7 40. 7 40. 9 40. 6 40. 7 40. 8 40. 9 40. 9	2. 10 2. 14 2. 13 2. 17 2. 14 2. 14 2. 14 2. 15	83, 50 84, 38 85, 36 86, 67 85, 86 84, 61 84, 35	40. 7 41. 4 40. 6 40. 4 40. 1 39. 6 39. 2 39. 8 40. 5 40. 1 39. 6 40. 6	9.06	\$78, 11 90, 18 81, 20 \$1, 20 \$2, 62 84, 95 84, 95 84, 95 85, 97 83, 64 84, 66 84, 25 84, 25	40. 6 40. 7 40. 4 40. 3 40. 5 41. 0 40. 8 40. 6 40. 9 40. 6 40. 9 40. 6	\$1. 85 1. 97 2. 01 2. 05 2. 05 2. 06 2. 06 2. 06 2. 06 2. 06 2. 07 2. 06 2. 07	\$76. 21 82. 89 82. 12 81. 34 82. 15 82. 76 83. 60 83. 02 84. 02 85. 24 86. 87 85. 85 84. 23 84. 85	61. 7 42. 5 41. 9 61. 8 41. 7 41. 8 41. 8 42. 2 42. 3 42. 3 41. 7 41. 8	\$1. 8 1. 9 1. 9 1. 9 1. 9 1. 9 2. 0 2. 0 2. 0 2. 0 2. 0 2. 0 2. 0 2. 0
	Syn	lhetic ru	iber	Syn	thetic fil	bere	E	rplosin	•	Drugs	and med	icipes	Soap, pollst	cleaning pre	g and para-	Soap	and ply	cerin
1985: A verage 1985: A verage 1986: February Mareb April May June July August September October November 1985: January February	87, 29 88, 89, 20 89, 20 89, 20 90, 76 91, 39 94, 92 91, 39 92, 80 92, 80 93, 02 92, 89	40. 8 40. 4 40. 0 40. 4 40. 0 40. 7 40. 8 42. 0 40. 8 41. 1 40. 7 40. 8 41. 1	\$2.00 2.15 2.20 3.25 2.22 2.23 2.24 2.24 2.26 2.26 2.25 2.25 2.26 2.26		39. 8 39. 7 39. 5 39. 6 40. 1 40. 7 40. 6 39. 6 40. 0 40. 4 40. 4 40. 5	\$1. 67 1. 76 1. 78 1. 79 1. 83 1. 82 1. 85 1. 82 1. 81 1. 81 1. 81 1. 81	\$70. 06- 74. 84 78. 63 76. 64 77. 81 78. 40 76. 05- 78. 21 78. 00 78. 01 79. 20 79. 00 79. 00 79. 80	39, 6 39, 6 40, 7 39, 3 39, 2 39, 7 40, 0 38, 8 7 39, 9 39, 6 40, 0 40, 1 40, 3 39, 9	1, 94 1, 95 1, 96 1, 96 1, 97 1, 97 1, 97 1, 98 1, 97 2, 00 2, 00	\$63. 44 68. 71 73. 38 70. 64 71. 40 71. 81 71. 63 72. 34 73. 34 72. 80 73. 32 74. 75	39. 9 60. 9 41. 7 41. 4 60. 6 40. 6 40. 6 40. 7 41. 2 40. 9 41. 3	\$1. 89 1. 68 1. 76 1. 76 1. 76 1. 76 1. 76 1. 76 1. 76 1. 78 1. 78 1. 79 1. 79 1. 81	\$73. 93 78. 47 79. 35 80. 78 79. 77 81. 97 81. 97 82. 81 83. 42 82. 01 82. 62 84. 25 84. 46	41. 3 41. 3 45 9 41. 2 40. 7 41. 1 41. 4 40. 9 41. 2 41. 5 40. 9 41. 5 41. 3 41. 4	\$1. 79 1. 90 1. 94 1. 96 1. 96 1. 97 1. 98 1. 99 2. 01 2. 01 2. 01 2. 02 2. 03 2. 04	\$81. 14 85. 97 97. 97 88. 88 87. 29 88. 86 89. 16 90. 86 91. 74 89. 98 91. 91 91. 02 92. 46	41. 4 41. 1 41. 2 41. 2 40. 6 41. 1 40. 9 41. 3 41. 7 40. 7 40. 9 41. 4 41. 0 41. 2	\$1. 96 2. 05 2. 13 2. 18 2. 16 2. 17 2. 18 2. 20 2. 20 2. 20 2. 22 2. 22 2. 22 2. 22
	Paint	ts, pigm d fillers	ente,		ts, sarns s, and co		Oun	and w temical	ood	,	ertilizer	•	Vegetal otla	hie and a	nimai •	Ve	petable o	ii.
1952: Average 1943: Average 1944: February March April May June July August September October November December Sebruary February	\$71. 26 76. 08 76. 67 76. 11 77. 04 77. 87 79. 04 79. 65 78. 83 77. 90 79. 07 79. 07 79. 68 78. 58 80. 12	41. 5 41. 8 41. 0 40. 7 41. 2 41. 2 41. 6 41. 7 41. 3 40. 8 41. 0 41. 4 41. 5 40. 9 41. 3	\$1. 72 1. 82 1. 87 1. 87 1. 87 1. 89 1. 90 1. 91 1. 91 1. 91 1. 92 1. 92 1. 92	\$70. 47 74. 64 78. 44 74. 70 74. 70 76. 45 77. 00 77. 38 76. 86 75. 74 78. 11 77. 64 77. 71 77. 11 78. 28	41. 7 41. 7 41. 9 40. 6 40. 6 41. 1 41. 6 41. 1 40. 5 40. 7 41. 3 41. 2 40. 8 41. 2	\$1. % 1. 79 1. 84 1. 84 1. 86 1. 86 1. 86 1. 87 1. 87 1. 88 1. 89 1. 89	\$100, 26 64, 22 65, 36 65, 05 67, 89 66, 17 67, 73 69, 17 68, 89 70, 14 67, 36 69, 21 67, 37 69, 04	42. 1 41. 7 41. 9 41. 7 42. 7 41. 1 42. 8 43. 5 43. 0 42. 1 42. 2 42. 4 42. 3 42. 0	\$1. 41 1. 54 1. 56 1. 56 1. 59 1. 61 1. 59 1. 60 1. 67 1. 60 1. 64 1. 60 1. 62	\$66, 23 59, 50 61, 32 62, 76 62, 33 61, 90 62, 16 61, 90 60, 19 60, 88 61, 86 61, 01 59, 02	42. 6 42. 4 42. 2 43. 8 44. 2 42. 4 42. 0 41. 6 41. 6 41. 8 41. 7 41. 8 41. 7	\$1, 32 1, 40 1, 41 1, 40 1, 42 1, 47 1, 48 1, 47 1, 50 1, 44 1, 48 1, 47 1, 48	861, 51 64, 89 66, 87 67, 33 68, 25 69, 89 70, 78 69, 99 70, 74 67, 68 69, 41 68, 36 68, 86	48. 9 48. 8 48. 8 44. 8 44. 8 44. 8 44. 8 47. 0 46. 9 46. 5 45. 8	\$1. 24 1. 42 1. 46 1. 47 1. 51 1. 54 1. 56 1. 58 1. 46 1. 49 1. 45 1. 45 1. 45	\$67. 97 59. 67 61. 58 62. 44 63. 66 63. 36 64. 37 64. 37 63. 10 64. 74 63. 32 62. 38 63. 56	46. 4 45. 6 46. 6 46. 6 46. 2 43. 6 43. 6 47. 6 46. 9 45. 4	1. 28 1. 30 1. 33 1. 34 1. 39 1. 43 1. 40 1. 49 1. 33 1. 32 1. 36 1. 37 1. 40
	Anima	i elle en	d fate	Misrel	innessus fenis	chem-	Essen	tial eds	per-	Com	present	end	Total:	Producti	ts of	-	nd coal cum ref	nine
982: Average	170. 34	44.8	\$1. 57	\$65.35	41. I	21.00	\$54. 49	36. 2	\$1.30	874. 10	efied pas	\$1.76	petrois	40.5	82.06	255 44	40.2	82.20
903; A verage 904; February March April May June July August September October November Documber 905; January February	74. 29 76. 88 75. 75 75. 58 76. 99 77. 96 78. 88 77. 66 78. 43 77. 63 80. 68 78. 32 78. 36	45. 3 44. 7 44. 3 44. 7 45. 6 45. 0 45. 6 45. 5 45. 5 45. 5	1. 64 1. 72 1. 71 1. 70 1. 71 1. 70 1. 71 1. 72 1. 71 1. 76 1. 71 1. 72	69. 94 71. 46 71. 10 70. 53 70. 93 71. 10 70. 98 71. 33 71. 51 72. 09 72. 54 73. 49 73. 53 73. 89	40. 6 40. 4 40. 3 40. 3 40. 4 40. 2 40. 4 40. 5 40. 6	1. 71 1. 76 1. 76 1. 75 1. 76 1. 77 1. 77 1. 77 1. 77 1. 80 1. 80 1. 81 1. 82	87. 66 61. 86 60. 45 60. 22 59. 90 60. 68 58. 28 56. 68 60. 14 60. 76 61. 76 62. 99 61. 60 62. 95	38. 7 39. 4 38. 5 38. 6 38. 4 38. 9 37. 6 38. 5 38. 8 39. 2 30. 2 30. 2 30. 3 31. 5	1. 49 1. 57 1. 57 1. 56 1. 56 1. 56 1. 55 1. 55 1. 55 1. 55 1. 55	80, 37 80, 67 80, 10 82, 96 81, 29 81, 71 82, 52 82, 71 83, 13 82, 74 83, 60 84, 60 84, 60	42.5 41.8 41.8 41.9 41.9 42.1 42.2 42.2 42.2 42.3 42.3	1. 90 1. 90 1. 90 1. 94 1. 94 1. 96 1. 96 1. 96 1. 97 1. 97 2. 00 2. 00 2. 00 2. 00	90. 17 90. 48 90. 45 91. 08 93. 52 93. 98 94. 53 93. 07 95. 56 92. 87 93. 02 92. 87 93. 02	40. 8 40. 3 40. 2 40. 3 41. 2 41. 4 41. 1 41. 0 41. 2 40. 6 40. 9 40. 8 40. 8	2. 21 2. 25 2. 25 2. 26 2. 27 2. 27 2. 30 2. 27 2. 32 2. 28 2. 28 2. 28 2. 28	94. 19 94. 47 94. 47 94. 87 97. 17 97. 17 97. 51 96. 06 97. 85 95. 75 97. 10 96. 22 96. 93	40. 6 40. 2 40. 2 41. 0 41. 0 40. 7 40. 5 40. 6 40. 6 40. 9	2. 82 2. 85 2. 85 2. 87 2. 87 2. 37 2. 38 2. 37 2. 38 2. 37 2. 38 2. 37 2. 37

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

			-1					Manu	facturin	g-Con	tinued							
	Prod.	ucts of p	etro- -Con.					1	Rubber	product						Leath	er and h products	eather I
Year and month	trole	and oth	er pe-	Tot	al: Rut producti	ber	Tire	s and it	nner	Rub	her foot	wear	Ot	her rub producti	ber	Total leati	: Leathe	er and ucts
	Avg. wkly. carn- ings	Avg. wkiy. bours	Avg. brly. enrn- ings	Avg. wkiy. earn- ings	Avg. wkiy. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. carn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. bours	Avg. hrly. earn- ings
1982: Average 1988: Average 1988: Average 1988: February March April May June July August September October November December 1968: January February	\$73. 74 78. 81 77. 95 76. 95 80. 06 83. 27 83. 13 87. 67 82. 17 81. 79 79. 58 70. 79	41. 7 43. 7 42. 1 42. 2 43. 4 41. 5 41. 1 40. 6	\$1.76 1.80 1.90 1.90 1.92 1.95 1.95 1.97 2.02 1.96 1.99	\$74, 48 77, 78 78, 47 74, 31 75, 08 77, 81 79, 60 76, 83 76, 25 77, 81 81, 20 83, 07 84, 25 84, 05	40, 7 40, 3 38, 9 38, 7 39, 7 40, 2 39, 4 41, 7 41, 3 41, 2	\$1, 83 1, 90 1, 94 1, 90 1, 98 1, 96 1, 98 1, 96 2, 01 2, 02 2, 04 2, 04	83, 03 80, 89 84, 14 88, 65 92, 06 87, 01 85, 65 86, 18 90, 39 94, 54 98, 18	40. 4 39. 6 37. 4 36. 6 37. 9 39. 4 40. 2 38. 5 37. 4 38. 3 40. 4 41. 6 41. 1 40. 7	2, 29 2, 36 2, 29 2, 25 2, 30	65, 51 63, 56 65, 46 67, 30 68, 45 66, 40 66, 08 71, 34	40. 4 40. 0 39. 8 30. 7 38. 3 39. 2 40. 3 40. 5 40. 0 39. 1 41. 0 41. 1 41. 2 40. 1	\$1. 54 1. 64 1. 65 1. 65 1. 67 1. 67 1. 69 1. 60 1. 74 1. 74 1. 72 1. 73	\$66. 58 70. 96 70. 96 70. 98 70. 98 70. 98 70. 98 71. 15 72. 36 74. 98 75. 71 76. 44 76. 05 76. 68	41. 1 41. 0 50. 0 30. 9 39. 6 40. 1 40. 1 30. 9 40. 2 41. 2 41. 3 41. 9	1.82 1.82 1.82	49, 21 51, 38 51, 24 49, 96 49, 62 51, 06 52, 16	35. 4 88. 7 87. 5 87. 4 36. 2 35. 7 87. 0 37. 8	\$1, 32 1, 37 1, 38 1, 38 1, 39 1, 37 1, 39 1, 38 1, 38 1, 38 1, 38 1, 39 1, 39
	Leatheried,	r: tanne	d, cur-		strial le		Boot	and shu and fine	eut dings	Foot	wear (es rubber)	cept	1	Luggage		Handt lea	ogs and ther goo	email de
1982: Average 1984: Average 1984: February Mareb. April. May June. July. August Sectember October November December January February	68, 23 68, 23 68, 34 67, 34 67, 34 68, 25 68, 43 68, 90 68, 32 60, 60 71, 64 72, 18 71, 46	39, 8 30, 9 39, 5 39, 1 38, 7 39, 6 39, 1 39, 2 34, 6 30, 1 30, 7 30, 7 30, 8	\$1. 62 1. 71 1. 73 1. 73 1. 74 1. 75 1. 76 1. 76 1. 77 1. 78 1. 80 1. 80 1. 80	964. 13 67, 97 96, 87 64, 87 64, 87 61, 91 63, 63 66, 97 60, 63 68, 68 69, 02 68, 06 67, 77	41. 1 41. 7 40. 6 39. 9 30. 1 38. 0 39. 4 38. 8 40. 1 39. 9 30. 6 40. 6 39. 8 39. 4	\$1. 86 1. 63 1. 67 1. 66 1. 66 1. 66 1. 67 1. 67 1. 67 1. 67 1. 70 1. 70	\$49. 40 50. 16 50. 67 50. 52 48. 05 48. 96 50. 12 49. 50 48. 55 49. 68 47. 66 50. 06 52. 52 52. 39 52. 92	38, 9 38, 0 38, 1 37, 7 35, 6 36, 0 37, 4 36, 5 36, 8 35, 8 36, 8 36, 8 36, 8 36, 8 36, 8	\$1. 27 1. 32 1. 33 1. 34 1. 36 1. 36 1. 32 1. 33 1. 35 1. 35 1. 35 1. 35	\$48. 26 49. 10 50. 41 49. 98 46. 42 45. 89 47. 78 48. 71 46. 68 45. 68 47. 39 49. 10 49. 88 51. 72	38, 0 37, 2 37, 9 37, 3 34, 9 34, 5 35, 9 37, 2 36, 9 35, 1 34, 3 35, 9 37, 2 37, 5 38, 6	\$1. 27 1. 33 1. 34 1. 33 1. 33 1. 33 1. 33 1. 33 1. 33 1. 33 1. 33 1. 33 1. 33	\$56, 70 57, 09 51, 54 56, 17 54, 60 57, 60 58, 11 56, 83 56, 24 50, 36 61, 20 50, 58 54, 66 55, 50 61, 14	40, 5 39, 1 34, 2 37, 2 36, 4 38, 0 38, 4 38, 0 38, 8 40, 0 2 36, 2 37, 0 39, 7	\$1. 40 1. 46 1. 51 1. 51 1. 50 1. 49 1. 48 1. 53 1. 53 1. 53 1. 52 1. 51	\$45, 08 46, 98 48, 88 49, 38 45, 00 45, 13 47, 13 47, 82 47, 82 48, 63 50, 02 49, 88 47, 85 69, 35	38, 2 39, 1 39, 5 30, 0 35, 3 37, 7 37, 9 39, 2 39, 1 38, 9 39, 7 39, 9 39, 8	\$1. 18 1. 20 1. 28 1. 28 1. 28 1. 29 1. 20 1. 20 1. 20 1. 25 1. 20 1. 25 1. 23
	Leath	er and le	eather con.						Stone	, cisy, a	nd glass	produc	te					
	Gloves	and mi	scells-	Total	Stone,	clay,	y	lat glass		Olass a presse	nd glass d or blo	ware,	Glass	contain	sere	Press	ed and bi glass	lows
1982: Average 1988: Average 1988: February March April May June July August September October November December 1988: January February	\$44, 15 44, 04 44, 27 43, 77 44, 02 43, 79 44, 90 45, 14 46, 39 46, 50 45, 00 45, 38 46, 00	37. 1 36. 4 35. 3 35. 5 35. 5 35. 6 36. 5 36. 7 36. 7 36. 0 37. 5 36. 0 37. 1	\$1. 19 1. 21 1. 24 1. 24 1. 23 1. 23 1. 23 1. 23 1. 24 1. 24 1. 24 1. 24 1. 24	70, 33 70, 36 70, 70 70, 70 70, 18 71, 10 70, 70 71, 33 72, 04 72, 85 73, 36 74, 36 73, 49 73, 49	41. 2 40. 9 40. 4 40. 4 40. 4 40. 3 40. 7 40. 7 41. 1 41. 1 40. 6 40. 6	\$3. 61 1, 72 1, 75 1, 76 1, 76 1, 76 1, 77 1, 77 1, 79 1, 81 1, 80 1, 81	\$88, 65 97, 34 100, 28 96, 90 96, 80 99, 38 97, 84 90, 29 100, 44 102, 12 111, 11 109, 04 114, 04 109, 57	40. 4 40. 9 41. 1 40. 0 40. 0 40. 1 39. 3 40. 5 42. 2 42. 9 43. 1 44. 2 42. 8	\$2, 12 2, 34 2, 40 2, 42 2, 41 2, 44 2, 48 2, 48 2, 48 2, 58 2, 58 2, 58 2, 58 2, 58	\$62. C9 67. 89 70, 09 70, 49 68. 94 69. 81 69. 48 69. 70, 77 71. 53 72. 28 72. 91 73. 08 72. 31 72. 65	39. 8 39. 6 39. 6 39. 6 38. 8 38. 4 39. 1 39. 7 39. 5 39. 5 39. 5	\$1. 56 1. 71 1. 77 1. 78 1. 80 1. 79 1. 81 1. 81 1. 82 1. 85 1. 85 1. 84 1. 83	\$63, 12 69, 60 72, 84 72, 90 72, 82 73, 33 70, 98 73, 45 71, 41 73, 63 73, 63 73, 94 72, 71 74, 03	39. 7 40. 0 40. 3 40. 0 39. 2 40. 1 39. 8 39. 0 39. 7 38. 8 39. 8 39. 8 39. 8	\$1. 89 1. 74 1. 80 1. 82 1. 85 1. 83 1. 83 1. 85 1. 85 1. 85 1. 85 1. 85	\$60, 89 65, 46 66, 95 67, 47 63, 81 65, 25 66, 75 66, 85 71, 96 70, 31 72, 19 71, 92 71, 92 71, 10	39. 8 39. 2 38. 7 39. 0 37. 1 37. 5 37. 5 38. 2 40. 2 39. 5 38. 4 30. 3 39. 3	\$1. 63 1. 67 1. 73 1. 73 1. 74 1. 74 1. 75 1. 75 1. 79 1. 88 1. 88 1. 83 1. 80
	Glass p	roducts rebased	made	Cemer	at, hydr	sulie		etural el		Brick o	nd holle	w tile	Floor	and wal	I tile	Se	wer pipe	
1982: Average 1983: Average 1984: February March April May June July August September October November December 1985: January February	\$46, 30 60, 01 59, 94 60, 49 59, 10 88, 29 59, 95 61, 76 62, 47 63, 77 64, 30 61, 50 61, 50	40. 8 41. 1 40. 5 40. 6 39. 2 39. 6 39. 7 40. 9 41. 1 42. 3 40. 5	\$1. 38 1. 46 1. 48 1. 40 1. 51 1. 50 1. 51 1. 51 1. 52 1. 52 1. 52 1. 52	67, 72 73, 30 74, 06 73, 61 74, 06 73, 98 77, 10 78, 44 76, 36 80, 22 76, 13 76, 53 76, 59 75, 59	41. 8 41. 7 41. 6 41. 7 41. 6 41. 5 41. 5 41. 6 41. 5 41. 6 41. 5	\$1. 62 1. 76 1. 78 1. 78 1. 80 1. 84 1. 89 1. 84 1. 83 1. 82 1. 82 1. 82	\$60, 09 64, 06 64, 08 65, 85 66, 74 66, 33 66, 17 67, 40 67, 40 67, 65 67, 65 67, 65 67, 65 67, 65 67, 65	40. 6 40. 8 40. 8 40. 8 40. 9 41. 2 41. 2 41. 1 41. 0 41. 1 41. 0 41. 1 41. 0 61. 3 40. 6	\$1. 48 1. 57 1. 59 1. 69 1. 61 1. 62 1. 61 1. 62 1. 65 1. 64 1. 65 1. 64 1. 64	\$58. 81 61. 777 62. 05 62. 05 65. 53 65. 82 66. 23 66. 20 66. 76 65. 79 66. 19 66. 79 66. 35 66. 36 66. 36	42. 4 42. 6 42. 8 42. 1 43. 3 43. 2 42. 9 43. 9 43. 7 43. 0 42. 7 43. 0 41. 8 41. 9	\$1. 39 1. 45 1. 46 1. 48 1. 51 1. 52 1. 51 1. 52 1. 53 1. 54 1. 53 1. 55 1. 55 1. 55	\$62. 64 67. 47 66, 36 67. 08 68. 40 70. 18 68. 68 68. 68 68. 28 67. 24 68. 80 68. 80 68. 80	39. 9 40. 4 39. 5 40. 2 39. 9 40. 0 40. 8 40. 4 40. 4 40. 4 39. 8 40. 0 40. 0	\$1. 57 1. 67 1. 68 1. 68 1. 71 1. 72 1. 70 1. 70 1. 71 1. 89 1. 69 1. 71 1. 72	\$59, 98 64, 56 64, 90 64, 90 66, 26 68, 06 67, 87 68, 68, 69 69, 19 68, 93 66, 23 66, 52 66, 52 66, 52 66, 52 66, 52	39. 2 40. 1 40. 0 40. 1 41. 0 41. 2 41. 1 41. 7 40. 5 40. 7 40. 8 39. 9 39. 1 39. 5	\$1. 53 1. 61 1. 61 1. 62 1. 64 1. 66 1. 67 1. 66 1. 69 1. 79 1. 66 1. 65 1. 65

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

		-						Manu	facturir	g-Con	tinued							
							Stone,	clay, a	nd glass	produc	ts-Con	tinued						
Year and menth	Cla	y efract	ories	Potter	ry and r product	elated	Cone	rete, gy ister pro	paum, ducts	Con	crele pro	ducte	Cut-si	one and product	stone	mek	linneous allic fueta •	non- minera
	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. briy. carn- ings	Avg. wkly. earn- ings	Avg. wkly. bours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. brly. earn- ings
1962: Average 1963: Average 1964: February March April May June July August September October November 1965: January February	\$61.60 66.85 65.96 65.16 64.44 66.06 67.16 69.33 68.63 70.13 72.00 71.62	37. 6 36. 4 36. 7 36. 7 36. 9 36. 3 36. 3 37. 5 38. 3	1.91	\$61. 15 62. 04 31. 62 62. 66 60. 79 50. 82 59. 95 57. 63 60. 33 64. 26 64. 73 63. 10 60. 72 63. 10	38. 7 37. 6 36. 9 37. 3 86. 4 36. 2 34. 1 35. 7 37. 8 38. 3 36. 9 31. 3	\$1.58 1.65 1.67 1.68 1.67 1.69 1.69 1.69 1.70 1.72 1.72	72. 48 72. 38 73. 04 73. 48 73. 54 78. 99 76. 08 75. 82 76. 27 75. 24 74. 12 72. 50	45. 0 43. 9 43. 4 43. 6 44. 0 44. 3 44. 7 45. 0 44. 6 44. 0 43. 6 42. 9 42. 6	1. 67 1. 66 1. 70 1. 69 1. 70 1. 71 1. 71	\$70. 22 71. 86 70. 63 70. 70 70. 56 71. 44 72. 46 73. 35 73. 86 74. 09 72. 27 70. 58 68. 69 68. 53	45. 8 43. 9 43. 6 43. 7 44. 1 45. 0 45. 0 45. 0 45. 0 45. 3 42. 3	\$1. 55 1. 63 1. 62 1. 62 1. 62 1. 63 1. 63 1. 63 1. 65 1. 63 1. 63	\$00. 01 63. 91 63. 55 64. 12 65. 16 63. 18 62. 87 64. 78 65. 35 66. 04 66. 36 66. 56 64. 21 63. 20	41. 1 41. 5 41. 0 41. 1 41. 2 41. 5 60. 5 40. 3 41. 0 41. 1 41. 8 42. 0 41. 6 40. 9 40. 0	\$1.46 1.54 1.55 1.56 1.56 1.56 1.56 1.56 1.58 1.58	\$69. 83 74. 07 72. 66 72. 66 72. 52 73. 47 72. 91 73. 25 74. 24 75. 58 76. 33 77. 30 78. 09 78. 25	39. 6 39. 2 39. 8 39. 3 39. 4 39. 7 40. 2 40. 6	\$1.72 1.82 1.84 1.84 1.86 1.86 1.86 1.86 1.87 1.88 1.88
		Sto	ne, clay	, and gl	ass proc	lucts-	Continu	ed				P	rimary	metal b	dustrie			
	Atra	seine proc	tucts	Aste	etos proc	lucts	Nonci	ay refra	ctories	Total:	Primar; adustrie	metal	Binst f work mills	urnaces rs, and r	steel- rolling	Filast work mills meta ucts	furnace is, and i, except illurgical	rolling electro- prod-
1952: Average	\$73. 45 79. 68 75. 86 75. 87 74. 69 78. 86 78. 27 73. 66 73. 48 75. 20 80. 40 83. 84 83. 68	30. 7 40. 6 38. 9 38. 3 38. 9 38. 8 36. 9 37. 9 39. 1 40. 0 41. 3 40. 9 41. 4	\$1. 86 1. 97 1. 95 1. 95 1. 95 1. 95 1. 94 1. 96 1. 97 1. 98 2. 90 2. 01 2. 03 2. 03 2. 04	\$71. 57 76. 43 78. 81 74. 52 74. 37 77. 23 79. 71 78. 40 78. 25 79. 57 78. 66 79. 04 79. 98 80. 98	42. 6 42. 7 41. 2 40. 5 40. 2 41. 3 42. 4 41. 7 41. 4 42. 1 41. 4 42. 1 42. 6	\$1. 68 1. 79 1. 84 1. 85 1. 87 1. 88 1. 88 1. 89 1. 90 1. 90 1. 90 1. 90	\$65. 70 71. 51 99. 95 65. 14 61. 74 61. 04 60. 28 63. 24 65. 93 68. 71 72. 90 75. 55 75. 89 76. 99 77. 00	36, 3 36, 3 34, 8 32, 9 31, 5 31, 3 30, 6 32, 1 33, 3 4, 7 36, 0 37, 4 37, 2 37, 3 37, 2	\$1. 81 1. 97 2. 01 1. 96 1. 96 1. 97 1. 97 1. 97 1. 98 2. 00 2. 02 2. 04 2. 04	\$77. 33 84. 25 79. 52 78. 28 77. 90 79. 49 80. 70 80. 81 80. 64 82. 39 82. 64 84. 53 85. 66 87. 26 87. 70	40. 7 40. 9 88. 6 38. 0 38. 4 38. 8 38. 4 38. 5 38. 5 40. 0 40. 4 40. 6	\$1.90 2.06 2.06 2.06 2.06 2.07 2.08 2.11 2.10 2.14 2.13 2.14 2.16 2.16	879. 60 87. 48 81. 27 79. 12 79. 39 81. 22 84. 00 82. 43 84. 90 84. 45 87. 30 87. 30 87. 32 89. 12 89. 72	40. 0 40. 5 87. 8 86. 8 37. 1 37. 6 38. 0 37. 5 37. 3 37. 4 37. 7 38. 8 39. 1 39. 7	\$1. 99 2. 16 2. 16 2. 16 2. 14 2. 16 2. 19 2. 24 2. 27 2. 24 2. 25 2. 25 2. 26 2. 26 2. 26 2. 26 2. 27 2. 26	\$79, 60 87, 48 81, 27 79, 18 81, 22 84, 60 82, 43 84, 90 84, 45 87, 30 87, 39 89, 72	40. 0 40. 5 87. 8 84. 8 37. 9 88. 0 37. 5 37. 3 37. 4 37. 7 38. 8 39. 7 39. 7	\$1.99 2.16 2.15 2.14 2.10 2.19 2.24 2.27 2.24 2.25 2.25 2.25 2.25 2.26
	Electro	ometallu products	rgical	Iron for	and st undries	eei 4	Oray-i	ron four	udries		Heable-ti oundries		Attes	d founds	ies	Prima and a ferro	ry si refining us mein	melting of non-
1962: Average 1963: Average 1964: February Mareb April May Jane July August September October November Docember 1985: January February	\$76. 04 80. 36 77. 61 77. 02 80. 18 78. 41 79. 00 79. 80 79. 90 82. 82 82. 01 82. 42 82. 42 83. 44 86. 73	41. 1 41. 0 39. 8 40. 7 39. 8 39. 7 739. 5 40. 6 40. 4 40. 6 40. 9 41. 9	\$1. 85 1. 96 1. 96 1. 96 1. 97 1. 97 1. 99 2.01 2.02 2.04 2.03 2.04 2.03 2.04 2.03	\$72. 22 76. 33 72. 77 72. 77 72. 96 72. 77 73. 83 74. 10 74. 11 75. 66 76. 04 77. 99 78. 78 82. 37	40. 8 40. 6 38. 5 38. 8 38. 4 38. 3 38. 7 28. 6 30. 0 28. 8 30. 2 30. 4 40. 4 41. 6	\$1. 77 1. 88 1. 89 1. 90 1. 90 1. 90 1. 90 1. 91 1. 93 1. 93 1. 94 1. 95 1. 98	\$60.89 74.89 71.61 71.42 72.56 72.56 72.73.30 72.73.73.49 73.51 75.05 76.05 77.76 78.36 81.73	40. 4 40. 7 38. 5 38. 4 38. 8 39. 2 39. 1 30. 3 39. 1 30. 5 40. 6 41. 7	\$1. 73 1. 84 1. 85 1. 86 1. 87 1. 87 1. 87 1. 87 1. 87 1. 88 1. 90 1. 91 1. 92 1. 93 1. 96	970. 56 76. 95 70. 11 74. 68 72. 56 72. 01 71. 25 69. 55 69. 55 74. 11 77. 02 78. 60 79. 17 79. 79 79. 79	39. 2 40. 5 36. 9 39. 1 37. 8 37. 7 36. 8 39. 1 38. 2 39. 7 40. 6 40. 5 41. 8	\$1. 80 1. 90 1. 90 1. 91 1. 92 1. 91 1. 89 1. 89 1. 94 1. 94 1. 95 1. 95 1. 98	\$77. 70 79. 98 77. 81 78. 43 78. 68 73. 48 75. 62 75. 62 76. 00 75. 60 778. 38 79. 79.	43. 0 40. 6 39. 3 88. 6 37. 4 37. 3 37. 6 37. 9 38. 0 38. 0 38. 0 38. 0 38. 0 38. 0 38. 0	\$1.85 1.97 1.98 1.98 1.97 1.98 1.98 1.99 2.00 2.00 2.00 2.02 2.02 2.02	878. 48 80. 93 79. 90 78. 40 78. 40 79. 89 79. 60 79. 60 79. 39 80. 40 80. 60 81. 00 82. 01 80. 40	41. 7 41. 5 40. 6 30. 9 30. 8 40. 0 40. 3 39. 8 40. 0 40. 3 40. 5 40. 6 40. 2	\$1. 81 1. 95 1. 97 1. 96 1. 97 2. 90 1. 98 2. 92 2. 91 2. 90 2. 90 2. 90 2. 90 2. 90
	Primar and r per, i	y sm efining c lead, and	elting f cop- t sinc	Prima	ry refini uminum	ng of	Seconds and nonfe	refining	eiting g of etals	Rolling and alk ferro	, dmy oying of us meta	non-	Rolling, alloyi	drawin ng of cos	g, and	Rolling, alloying	drawin of alum	g, and inum
1952 A verage 1963 A verage 1964: February March April May June July August September October November December 965: January February	\$75.06 80.41 77.93 74.66 74.28 74.66 76.21 78.85 76.59 74.69 74.69 77.97 79.37	41. 7 42. 1 40. 8 39. 8 39. 8 39. 5 39. 3 40. 1 38. 3 39. 6 40. 0 40. 4 40. 7 40. 3	\$1.80 1.91 1.92 1.89 1.89 1.91 1.90 1.95 1.93 1.94 1.93 1.95	\$76. 08 81. 81 82. 80 83. 84 84. 45 84. 45 84. 45 85. 24 85. 01 86. 90 86. 90 86. 24 85. 60	41. 8 40. 5 40. 5 40. 6 40. 6 40. 6 40. 4 40. 1 40. 1 40. 8 40. 4 40. 8 40. 4 40. 8	\$1. 82 2.62 2.07 2.07 2.08 2.08 2.11 2.12 2.14 2.13 2.14 2.14 2.14	\$68. 15 73. 63 73. 63 72. 85 72. 85 73. 81 72. 67 75. 05 77. 15 77. 75 78. 31 77. 79 79. 10	41. 3 41. 6 40. 7 40. 7 41. 0 41. 8 40. 6 41. 3 41. 7 41. 7 42. 1 42. 3	\$1.65 1.77 1.79 1.79 1.80 1.81 1.81 1.84 1.85 1.86 1.86 1.87	\$74. 29 82. 91 77. 82 78. 41 80. 20 81. 19 79. 60 83. 43 83. 44 85. 90 86, 35 87, 78	41. 5 42. 3 39. 5 39. 6 40. 3 40. 8 40. 1 41. 1 40. 7 41. 7 41. 7 41. 7 42. 2	\$1.79 1.96 1.97 1.98 1.99 1.99 1.99 2.01 2.03 2.05 2.06 2.06 2.06	\$76. 49 85. 37 75. 64 76. 43 79. 80 82. 01 81. 40 83. 64 88. 40 87. 56 89. 89	41. 8 42. 9 38. 5 38. 5 39. 9 40. 8 40. 7 40. 6 42. 5 42. 5 42. 8	\$1. 83 1. 99 1. 98 1. 98 2. 00 2. 01 2. 00 2. 04 2. 06 2. 08 2. 09 2. 10	77. 96 77. 96 77. 96 79. 58 79. 58 79. 58 70. 77 76. 85 81. 81 82. 22 81, 61 81. 81 82. 67 85. 67 86. 67	40. 2 40. 8 40. 5 40. 6 40. 6 40. 7 38. 5 40. 8 40. 8 40. 8 41. 8 41. 6	\$1. 74 1. 91 1. 94 1. 96 1. 96 1. 96 1. 97 2. 00 2. 03 2. 02 2. 02 2. 03 2. 04 2. 04

840167-55-7

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									Manu	facturi	ng-Cun	tinued							
v	ear and menth						Prima	ry meta	indust	rico - Co	untinued	1					nano and t	riested in cts (exce e, mach: ranspor- quipmen	inery, tation
-		Nonte	rrous for	indries	Miscel ry me	laneous tal indu	prima- etrice i	Iron as	ul steel)	urgings	187	ire draw	ing	Weld	ed and i	leasy-	Tota	i: Fabri	nated unts
		Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkiy, earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1962 1963 1964	A verage. February Marsis April Msy June July August September October November	877, 79 80, 97 80, 20 78, 01 79, 00 78, 01 79, 19 77, 79 79, 80 80, 39 84, 25 84, 86 84, 03 84, 66	39. 4 38. 7 39. 7 39. 6 40. 9 40. 6 40. 9	2.00 2.01 2.01 2.03 2.06 2.06 2.07 2.08	82, 29 81, 66 83, 53 88, 30 84, 10 84, 53 86, 78 86, 18 90, 45	38.7 39.4 39.9	2. 12 2. 14 2. 14 2. 16 2. 16 2. 16 2. 17	\$66.09 91.12 87.56 85.58 83.22 84.04 84.42 86.08 85.79 87.46 88.76 68.76 68.76 69.26 94.25	42. 2 41. 8 39. 8 39. 9 38. 9 38. 2 38. 2 38. 3 38. 7 39. 3 40. 8 41. 4	\$2.04 2.18 2.20 2.20 2.19 2.20 2.21 2.22 2.23 2.24 2.26 2.27 2.28 2.31 2.33	84, 21 86, 92 84, 80 85, 65 87, 10 87, 33 87, 74	41. 3 41. 0 39. 2 39. 1 39. 1 40. 1 40. 0 40. 0 40. 7 41. 0 41. 0 42. 2 42. 1 42. 3	\$1.95 2.07 2.08 2.08 2.10 2.12 2.12 2.12 2.14 2.13 2.14 2.16 2.17 2.18	82, 97 84, 85 86, 00 85, 24 83, 16 86, 03 85, 22 82, 89	41. 4 40. 6 39. 5 39. 7 40. 6 40. 8 40. 4 39. 6 40. 2 39. 1 40. 2 39. 1 40. 2	2.06 2.06 2.11 2.11	77, 38 76, 92 75, 60 76, 95 77, 74 78, 53 79, 71 80, 70 80, 34	41. 6 41. 7 40. 6 40. 1 40. 7 40. 7 40. 0 40. 5 40. 7 40. 9 41. 3 41. 2 41. 2	1. 80 1. 90 1. 90 1. 90 1. 90 1. 90
			13 40.4 2.08 56 40.7 2.08 man and other tinware		Cuties	y, hand hardwa	tools,	Cutter	and ed	petonis		fandtook			fardware		(except	ng appa t electric	e) and
1959: 1956: 1954:	A verage A verage February March A pril May June July A ugust September October November December January February	\$66, 31 75, 71 81, 71 79, 39 78, 94 82, 74 83, 13 81, 34 80, 00 79, 20 81, 00 81, 00	41. 5 41. 6 41. 9 42. 0 42. 2 41. 0 42. 2 41. 6 40. 2 39. 44. 4 40. 3 40. 3	\$1. 67 1. 82 1. 95 1. 93 1. 97 1. 97 1. 96 1. 99 1. 99 2. 01 2. 01 2. 01	\$69, 08 74, 05 73, 38 72, 04 72, 02 74, 74 72, 29 74, 74 75, 11 78, 70 76, 48 79, 23 79, 84	41, 1 41, 6 40, 1 39, 8 39, 9 40, 4 39, 7 40, 6 40, 7 40, 6 41, 7 41, 6 41, 7	\$1, 68 1, 78 1, 83 1, 81 1, 82 1, 83 1, 83 1, 83 1, 85 1, 86 1, 86 1, 87 1, 89 1, 90 1, 91	963. 85 67, 32 65, 67 68, 44 63, 41 66, 00 65, 74 64, 29 66, 17 66, 90 68, 21 69, 90 68, 28 67, 83	41. 0 41. 3 39. 8 39. 9 40. 0 39. 6 39. 2 40. 1 40. 3 40. 6 41. 4 41. 2 40. 4 39. 9	\$1. 56 1. 63 1. 64 1. 63 1. 65 1. 66 1. 66 1. 66 1. 66 1. 66 1. 69 1. 70	\$400. 38 74. 70 73. 42 73. 06 72. 10 72. 31 72. 13 70. 84 73. 26 73. 26 73. 10 74. 21 74. 50 75. 33 75. 36	41. 3 41. 5 39. 9 39. 7 39. 4 39. 3 39. 6 39. 6 39. 6 39. 6 40. 5 40. 5	\$1. 68 1. 90 1. 84 1. 83 1. 84 1. 84 1. 85 1. 85 1. 85 1. 86 1. 86 1. 87	\$70. 69 75. 89 75. 76 74. 03 75. 95 78. 50 78. 01 75. 79 77. 93 78. 80 79. 30 79. 30 79. 35 83. 10 83. 92 85. 37	41. 1 41. 7 40. 3 80. 8 40. 4 41. 1 39. 9 40. 1 41. 3 41. 2 42. 6 42. 9	\$1. 73 1. 82 1. 88 1. 91 1. 88 1. 91 1. 91 1. 91 1. 92 1. 93 1. 97 1. 97	\$70, 96 73, 57 73, 10 73, 10 70, 65 73, 28 74, 59 72, 34 75, 14 75, 20 76, 92 75, 70 76, 76 75, 06 76, 02	40, 8 40, 2 39, 3 38, 3 38, 4 39, 4 40, 1 39, 1 40, 0 40, 7 40, 1 40, 2 39, 3 39, 8	\$1. 74 1. 83 1. 86 1. 86 1. 86 1. 86 1. 86 1. 86 1. 89 1. 91 1. 91
		Sonito	ary ware lers' sup	and plies	Oil bur tric hea ing ag elseuch	mers, no ting and sparatus ere class	nelec- cook- , not ifted	Fabrica al met	sted stra	etur-	Structi	ral strei ental m work	and etai-	Metal frames,	doors, s molding trim	rash, p, and	Boller-	skop pro	duete
1982: 1983: 1984: 1986:	A verage. A verage. A verage. A verage. Yearnary. March. A pril. May. June. July. A ugust. September. October. November. Desember. January. February.	\$73. 06 75. 66 74. 69 76. 04 72. 58 75. 66 77. 79 78. 83 79. 38 76. 44 79. 39 81. 90 80. 40 80. 00	40. 6 39. 6 38. 9 36. 4 37. 8 30. 2 40. 1 30. 7 40. 5 40. 4 40. 9 40. 5 40. 2	\$1. 84 1. 91 1. 92 1. 93 1. 92 1. 93 1. 94 1. 91 1. 95 1. 95 2. 00 2. 00 2. 00	969, 87 72, 32 72, 29 71, 62 69, 87 72, 29 73, 38 74, 56 75, 86 74, 56 75, 60 74, 80 71, 74 73, 84	41. 1 40. 4 30. 5 30. 3 38. 6 30. 8 40. 4 40. 3 40. 8 40. 8 30. 8 30. 8 30. 7	\$1, 70 1, 79 1, 83 1, 83 1, 83 1, 82 1, 82 1, 85 1, 86 1, 85 1, 86 1, 86 1, 86 1, 87 1, 87	\$74. 87 80. 78 79. 49 79. 69 78. 72 79. 30 80. 06 79. 73 79. 35 79. 86 79. 86 80. 15 78. 59 78. 20	42.3 42.6 41.6 41.2 41.0 41.3 41.7 41.0 9 40.8 40.8 41.1 40.3 40.1	\$1.77 1.90 1.92 1.91 1.92 1.92 1.93 1.94 1.94 1.95 1.95 1.96	\$78. 06 81. 27 79. 96 79. 42 80. 41 81. 75 79. 46 80. 87 79. 30 79. 90 80. 10 79. 52 77. 38 77. 20	42.4 43.3 42.1 41.8 42.1 42.8 41.6 41.9 41.3 41.4 41.5 40.3 80.0	\$1.77 1.80 1.91 1.90 1.91 1.91 1.91 1.93 1.92 1.93 1.93 1.93	874. 23 78. 44 74. 62 76. 21 76. 42 76. 99 70. 10 79. 38 79. 79 80. 19 79. 79 83. 40 79. 39	41. 7 41. 8 39. 9 39. 8 40. 1 41. 2 40. 9 40. 4 40. 8 40. 5 40. 5 40. 5 40. 3	\$1. 78 1. 89 1. 90 1. 91 1. 92 1. 92 1. 94 1. 94 1. 97 1. 98 1. 98 1. 98 1. 98	874. 80 80. 94 80. 97 78. 30 78. 74 78. 74 77. 79 78. 76 79. 15 78. 30 79. 17 79. 77 79. 50 78. 00	42. 5 42. 6 41. 3 40. 9 40. 8 40. 8 40. 6 40. 6 40. 2 40. 6 40. 7 40. 6 40. 7	\$1. 76 1. 90 1. 93 1. 92 1. 93 1. 93 1. 94 1. 94 1. 94 1. 95 1. 95 1. 96 1. 97 1. 95
		Sheet	-metalse	ork	Metal coating	stampi and en ing	ing, grav-	Vitree	us-enam roducts	eled	Stamper	i and pr i produc	ressed to	Light	ing flass	ires	Fabricat	ed wire	prod-
	Average. Average. February. March. April May June July August. September October November January February	\$75, 18 90, 22 76, 90 77, 50 77, 18 79, 73 79, 93 79, 37 79, 37 79, 17 78, 78 78, 20 80, 57 78, 20 78, 20 78, 69	42.0 42.0 40.0 40.2 40.2 41.1 41.3 41.0 40.7 40.6 40.1 40.9	\$1.79 1.91 1.92 1.93 1.92 1.94 1.94 1.94 1.95 1.95 1.95 1.95 1.95	\$74. 29 78. 81 78. 76 77. 97 78. 18 90. 36 70. 58 76. 40 85. 02 86. 63 85. 87 85. 87 86. 24	41. 5 41. 7 40. 6 40. 8 41. 9 40. 6 39. 0 40. 8 41. 7 42. 3 42. 3 42. 3 42. 2	\$1. 79 1. 89 1. 94 1. 96 1. 96 1. 96 1. 98 1. 98 1. 99 2. 01 2. 01 2. 03 2. 02	\$54.00 50.00 61.00 60.83 60.83 51.00 59.01 56.13 61.24 63.18 63.34 63.34 63.43 64.31 62.31	87. 5 88. 6 88. 5 88. 5 88. 4 88. 2 85. 3 87. 8 89. 0 39. 1 29. 4 39. 7	\$1. 44 1. 53 1. 60 1. 59 1. 59 1. 50 1. 63 1. 60 1. 62 1. 62 1. 62 1. 62 1. 62	\$777. 33 81. 90 80. 79 80. 19 80. 19 80. 60 83. 01 82. 21 79. 40 80. 60 83. 84 85. 90 87. 98 88. 18 89. 45	41. 8 42. 0 40. 6 40. 5 41. 3 40. 9 39. 5 40. 1 41. 1 41. 9 42. 5 42. 6	\$1.85 1.95 1.99 1.99 2.01 2.01 2.01 2.01 2.01 2.05 2.07 2.07 2.07 2.09 2.09	958. 00 72. 80 70. 49 70. 35 71. 82 71. 10 71. 28 70. 71. 28 70. 72. 32 76. 48 79. 68 80. 51 78. 95	40. 0 40. 5 39. 6 39. 3 39. 9 39. 5 39. 6 39. 6 40. 4 40. 9 41. 5 41. 5 40. 7 41. 0	\$1.70 1.79 1.78 1.78 1.79 1.80 1.80 1.79 1.79 1.87 1.92 1.94 1.94	72. 62 72. 62 72. 64 72. 76 71. 46 72. 58 72. 80 72. 94 73. 12 72. 72 73. 89 76. 18 77. 93 76. 18 77. 93 76. 30	40. 9 40. 8 39. 8 40. 2 39. 7 40. 1 40. 0 40. 3 30. 4 40. 2 40. 6 41. 4 41. 4 41. 8 40. 8	\$1. 67 1. 78 1. 81 1. 80 1. 81 1. 82 1. 81 1. 81 1. 82 1. 84 1. 86 1. 86 1. 85

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									Man	ufsetur	ing—Co	ntinued							
			Pabrica	ted met	al produ	iets (exc	ept ord	nance, r	machine	ry, and	transpe	rtation	equipa	ent)—C	Continue	ed	Mac	hinery (except d)
¥	ear and menth	Misce cate ucts	llaneous d metal	fabri- prod-	Metal a	hipping , kegs, a	barrels, nd palls	s	ed opri	· .	Bolts,	nuts, w	askers,	See	rew-mac product	Aims ,	Tota (exo	i: Maci ept elect	inery rical)
		Avg. wkly. earn- ings	Avg. wkly. bours	Avg. hrly. enm- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. hrly. mrn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. hrly. earn- lngs
1982 1953 1954	Average February March April May June July August September October November December	\$73. 02 78. 51 76. 85 74. 34 72. 47 73. 78 74. 56 73. 28 74. 00 75. 70 97. 38 80. 75 81. 22 81. 67	42. 7 42. 9 41. 0 40. 4 39. 6 40. 1 40. 3 90. 4 40. 7 41. 0 42. 0 42. 5 42. 3 42. 5	1. 84 1. 83 1. 84 1. 85	82, 35 82, 01 82, 61 80, 60 85, 68 84, 84 77, 90 85, 08 83, 44 83, 64	43. 5 41. 8 40. 6 41. 1 42. 0 42. 0 38. 8 41. 1 40. 7 40. 6 40. 4 40. 4 41. 3 42. 0	\$1. 63 1. 97 2. 02 2. 01 2. 01 2. 04 2. 02 2. 01 2. 07 2. 06 2. 06 2. 08 2. 08 2. 07	\$74, 26 83, 13 79, 00 77, 07 78, 07 78, 04 77, 81 76, 04 74, 48 73, 30 77, 01 85, 49 85, 41 89, 89	40. 8 42. 2 40. 1 39. 3 38. 3 37. 9 39. 1 38. 6 38. 0 37. 4 41. 5 41. 5 41. 42. 1 42. 1	\$1. 83 1. 97 1. 97 1. 98 1. 98 1. 99 1. 97 1. 96 1. 99 2. 06 2. 07 2. 10	75, 92 73, 66 72, 53 72, 91 73, 68 73, 14 74, 26 77, 52 78, 91 80, 87 83, 42	42. 1 42. 8 40. 6 39. 6 39. 2 39. 4 38. 7 39. 5 40. 8 41. 1 41. 9 43. 0 43. 4 43. 1	\$1, 73 1, 85 1, 87 1, 86 1, 86 1, 86 1, 87 1, 89 1, 90 1, 93 1, 94 1, 97 1, 96	\$76. 37 81. 07 78. 95 74. 62 72. 28 74. 12 73. 93 71. 92 72. 62 75. 26 76. 45 79. 10 80. 22 78. 35 80. 70	44. 4 44. 3 41. 8 41. 0 39. 3 60. 4 39. 3 39. 9 41. 1 42. 3 42. 9 41. 9 41. 9	\$1. 72 1. 83 1. 83 1. 82 1. 83 1. 83 1. 83 1. 83 1. 84 1. 86 1. 87 1. 87	\$79. 79 82. 91 82. 60 81. 61 81. 61 80. 60 81. 81 81. 61 82. 01 83. 43 83. 64	42. 9 42. 3 41. 3 41. 1 40. 6 40. 5 40. 1 40. 2 40. 2 40. 4 40. 8 41. 0	\$1, 80 1, 90 2, 90 2, 90 2, 91 2, 91 2, 91 2, 91 2, 94 2, 94
		Engine	and tu	rbines *	Steamer and	ngines, to water sol	irbines, lecis	terna	and oth l comb les, not classifi	nation	Agricul ery a	itural m	achtn- ors 4		Tractore		Agricul (exe	tural ma ept track	chinery
1982: 1988: 1984:	Average February Mareh April May June July August September October November	\$82. 68 85. 28 86. 30 86. 28 83. 39 86. 07 83. 81 85. 44 84. 77 85. 84 85. 97 86. 86 90. 03 88. 99 90. 42	42. 4 41. 2 40. 9 40. 7 30. 9 40. 6 40. 1 40. 3 39. 8 40. 4 41. 3 41. 2 41. 4	\$1. 95 2.07 2.11 2.12 2.09 2.12 2.09 2.12 2.13 2.16 2.16 2.18 2.16 2.16	\$49, 62 93, 95 97, 06 99, 05 99, 05 89, 60 94, 76 86, 14 92, 34 98, 17 98, 19 97, 34 100, 67 97, 75 94, 71 91, 01	42.8 42.0 42.2 42.5 41.2 38.8 40.5 41.2 40.9 41.6 40.9	\$2.08 2.23 2.30 2.33 2.24 2.30 2.22 2.31 2.38 2.42 2.39 2.31 2.35 2.31	980, 37 82, 41 82, 63 81, 20 81, 20 81, 20 82, 82 83, 23 83, 02 80, 36 80, 36 81, 40 86, 74 88, 83	42. 8 41. 0 40. 8 40. 0 35. 9 40. 4 40. 6 40. 3 39. 9 41. 4 41. 5 42. 1	\$1. 90 2.01 2.04 2.03 2.05 2.05 2.05 2.06 2.07 2.07 2.04 2.10 2.09 2.11	\$75. 41 77. 21 77. 63 79. 60 78. 41 78. 80 78. 41 77. 93 77. 22 78. 80 76. 81 78. 40 80. 40 82. 011 83. 23	29. 9 39. 8 39. 6 40. 1 39. 8 39. 8 39. 8 39. 2 40. 0 40. 4 40. 6	\$1, 89 1, 94 1, 95 1, 95 1, 96 1, 96 1, 96 1, 96 2, 00 2, 00 2, 01 2, 03 2, 05	\$77. 02 79. 20 79. 79. 81. 40 80. 17 80. 77 78. 78 80. 36 80. 39 79. 52 81. 97 84. 03 86. 31 86. 51	30. 7 30. 6 30. 3 30. 9 30. 9 30. 0 30. 0 30. 0 39. 8 38. 6 40. 4 41. 1 41. 0	\$1, 94 2, 00 2, 03 2, 04 2, 04 2, 05 2, 02 2, 02 2, 07 2, 07 2, 06 2, 07 2, 07 2, 10 2, 11	\$73. 97 78. 20 76. 02 77. 36 76. 61 76. 99 77. 97 78. 45 74. 67 73. 73 74. 69 77. 02 77. 02 77. 02 77. 02	40. 2 40. 0 39. 8 40. 3 39. 9 40. 1 40. 4 39. 5 39. 3 39. 1 38. 6 58. 9 30. 7 39. 7 40. 2	\$1. 84 1. 88 1. 91 1. 92 1. 92 1. 92 1. 93 1. 01 1. 90 1. 94 1. 94
		Constru ing	etion an machine		Construing n	ction an nachiner or oilfiel	d min-	Ounds	machine tools		Metal	working hinery	ma-	Ma	chine to	de	Metul chine chine	working ry (excep tools)	ma- d ma-
952: 953: 954:	A verage. A verage. February March. April May June July August September October November December Junuary February	\$77. 61 79. 42 80. 93 78. 74 79. 79 79. 78 78. 70 78. 59 77. 62 78. 01 79. 00 80. 78 80. 39 82. 19	43. 6 41. 8 41. 5 40. 9 41. 0 40. 9 41. 0 40. 3 39. 6 39. 8 40. 1 40. 8 40. 6 41. 3	\$1. 78 1. 90 1. 94 1. 93 1. 95 1. 95 1. 95 1. 96 1. 96 1. 96 1. 96 1. 96 1. 96 1. 96	876. 64 78. 86 78. 36 78. 74 77. 87 78. 98 77. 89 77. 42 77. 42 77. 22 78. 01 79. 98 80. 39 81. 99	43. 3 41. 6 40. 6 40. 5 40. 5 39. 6 39. 7 39. 6 39. 7 39. 6 40. 6 40. 6 41. 2	\$1. 77 1. 90 1. 93 1. 93 1. 92 1. 94 1. 95 1. 94 1. 95 1. 95 1. 95 1. 95 1. 96 1. 96	\$79. 48 80. 98 86. 33 81. 90 81. 93 82. 54 82. 55 78. 90 78. 90 79. 70 81. 79 80. 19 83. 20	44. 4 42. 4 43. 6 41. 9 41. 9 42. 1 40. 3 41. 9 39. 4 40. 3 40. 7 41. 1 40. 5 41. 6	\$1. 79 1. 91 1. 98 1. 96 1. 96 1. 97 1. 96 1. 96 1. 98 1. 98 2. 00 1. 98 2. 00	\$91, 87 96, 64 94, 39 92, 74 92, 45 92, 87 92, 64 92, 20 92, 20 91, 96 91, 76 91, 14 91, 14	46. 4 45. 8 43. 9 42. 6 42. 6 42. 8 42. 1 42. 3 41. 8 41. 7 41. 5 41. 9 42. 0 42. 0	\$1. 98 2. 11 2. 18 2. 18 2. 18 2. 19 2. 19 2. 19 2. 20 2. 21 2. 21 2. 19 2. 20 2. 21 2. 19 2. 21 2. 19 2. 21 2. 21 21 21 21 21 21 21 21 21 21 21 21 21 2	\$80, 96 94, 92 93, 60 93, 21 89, 42 88, 61 87, 36 86, 21 87, 36 87, 99 86, 20 87, 78 88, 62	47. 1 46. 8 44. 6 43. 2 42. 6 41. 8 41. 6 41. 7 41. 1 41. 8 42. 0	\$1. 91 2.05 2.09 2.07 2.06 2.06 2.10 2.11 2.10 2.11 2.10 2.11	\$85, 95 89, 52 86, 51 86, 10 84, 46 84, 46 84, 87 86, 10 85, 70 84, 45 83, 41 83, 21 83, 26 85, 28 85, 90	45. 0 44. 1 42. 2 42. 0 41. 0 40. 8 41. 0 41. 3 40. 6 40. 1 40. 7 41. 0 41. 0	\$1, 91 2.08 2.06 2.08 2.07 2.07 2.07 2.10 2.08 2.08 2.08 2.09 2.08 2.08 2.08 2.08
		Machi	ne-tool a sories	ecer-	Special- chine metal chine	industr iry (ex working	yma- cept ma-	Food-p	roducts Ainery	184	Teatil	machin		Paper-i	ndustrie Ainery	ma-	Printis chinery o	ig-trades md equi;	ma- pment
962. 963: 964:	A verage A verage February March April May June. July August September October November December January February	965. 53 100, 90 98. 34 97. 66 98. 62 99. 82 99. 36 90. 50 100. 50 98. 18 98. 60 97. 29 97. 29 97. 29 96. 28 96. 28	46. 6 46. 3 44. 1 43. 6 43. 5 43. 3 43. 3 42. 5 42. 5 42. 5 42. 5 42. 5	\$2.05 2.18 2.23 2.24 2.29 2.30 2.30 2.31 2.32 2.30 2.29 2.30 2.29 2.30 2.29 2.30 2.29 2.30 2.20 2.31 2.31 2.32 2.30 2.30 2.30 2.30 2.30 2.30 2.30	\$77. 49 81. 32 81. 29 89. 67 79. 13 79. 15 77. 78 77. 78 77. 78 79. 37 79. 98 79. 98 80. 16 79. 95	43. 0 42. 8 41. 9 41. 0 40. 8 40. 7 40. 3 40. 5 40. 7 41. 0 41. 5 40. 7	\$1.80 1.90 1.94 1.93 1.93 1.93 1.93 1.93 1.95 1.95 1.95	\$77. 96 81. 58 84. 94 83. 36 80. 67 79. 97 79. 18 79. 50 79. 50 79. 50 79. 50 79. 50 79. 50 79. 50	42.6 62.7 42.9 42.4 41.1 40.8 40.4 40.6 40.4 41.1 40.4 41.1 40.6 7	\$1.83 1.91 1.98 1.97 1.97 1.96 1.96 1.96 1.96 1.97 1.96 1.96	\$68. 54 71. 93 71. 69 71. 05 69. 62 69. 65 67. 16 68. 64 70. 18 71. 63 72. 86 72. 86	40. 8 41. 1 40. 5 40. 3 39. 6 39. 8 39. 8 39. 8 39. 2 40. 1 40. 7 41. 4 40. 9 41. 3	\$1. 68 1. 75 1. 77 1. 76 1. 76	\$82.08 82.84 83.98 84.10 82.06 82.94 83.29 81.96 83.27 86.53 83.27 86.53 83.27	45. 6 44. 3 44. 2 44. 5 43. 2 43. 6 42. 7 42. 0 42. 7 42. 7 42. 7 43. 7 42. 7 43. 7 42. 7 43. 6	\$1.80 1.87 1.90 1.90 1.90 1.91 1.02 1.91 1.95 1.95 1.95 1.95	987. 36 94. 59 91. 38 92. 23 97. 56 87. 53 90. 73 85. 56 87. 72 88. 32 88. 34 87. 67 90. 03	43. 9 44. 2 42. 8 41. 0 40. 9 42. 2 40. 8 40. 7 41. 0 40. 9 41. 3	81. 99 2.14 2.18 2.17 2.14 2.18 2.14 2.18 2.14 2.18 2.16 2.17 2.16 2.17 2.16 2.17 2.18 2.17 2.18

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1-Continued

									Manu	facturin	g-Con	tinued							
								Mach	inery (e	zcept e	ketrical)—Cont	inued						
Ye	ear and month	Gene	ral Indu	strial y	Pump	ps, air a mpresso	nd gas rs	Conse	ryors an 19 equip	t con-	Blowe	rs, exhau tilating)	ust and lane	Indu	utrial tr actors, e	ucks, le.	Mech	ianical p ission opt	ower- sipment
		Avg. wkiy. esrn- ings	Avg. wkly. hours	Avg. hrly. enrn- ings	Avg. wkiy, earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkly. earn- ings	Avg. wkiy. bours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. briy. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. briy. earn- ings
1982: 1988: 1984: 1984:	A verage February March April May June July August September October November	\$79. 24 83. 42 81. 36 79. 77 78. 90 79. 39 80. 10 80. 20 80. 80 81. 20 81. 61	43. 3 43. 0 41. 3 40. 3 40. 3 40. 5 40. 4 40. 4 40. 4 40. 6	1. 98 1. 99 2. 00 2. 01 2. 00 2. 01 2. 01	76. 63 77. 60 77. 81 79. 00	40. 4 40. 3 39. 5 40. 0 29. 9 40. 1 40. 5 40. 6		\$79. 79 84. 44 82. 76 81. 16 81. 16 70. 79 82. 00 82. 61 85. 06 80. 80 81. 20 78. 38 81. 81 80. 57 80. 57	42. 9 43. 3 41. 8 41. 9 41. 1 42. 1 40. 1 40. 0 40. 0 38. 8 40. 3 39. 3 39. 3	2.00 2.01 2.02 2.01 2.02 2.03 2.03	73. 68 74. 77 75. 62 76. 40 75. 22 75. 43 74. 64	40. 8 30. 9 40. 0 40. 1 40. 5 39. 4 40. 2 39. 8 89. 7 39. 7	1. 83 1. 85 1. 87 1. 86 1. 90	81.41 78.61 79.40 80.60	43. 2 42. 6 39. 4 39. 5 39. 7 40. 4 28. 4 40. 5 39. 5 39. 5 40. 3 40. 1	1. 97 1. 97 1. 99 2. 01 1. 99 1. 90	\$79. 98 85. 98 81. 99 79. 40 79. 20 79. 79 80. 00 78. 80 80. 80 82. 62 83. 03 83. 44 83. 85 84. 05	41. 2 40. 1 40. 0 40. 3 40. 2 30. 6 40. 1 40. 2 40. 7 40. 7 40. 9	1. 98 1. 99 1. 99 1. 90 2. 01 2. 03 2. 04 2. 04
		and in	anical s dustrial	fur-	Office	and sto	re ma- vices *	Compa	iting ma ash regi	chines sters	7	ppewrite	**	Service	-indust	ry and		estic lau quipmen	
1982: Average 1983: Average 1984: February March April May June July August September October November December 1985: January February		\$76, 97 81, 62 82, 70 81, 77 80, 19 79, 69, 81, 00 79, 61 79, 61 81, 41 90, 30 81, 60 80, 30 80, 30 80, 30	43. 0 42. 2 41. 8 41. 8 40. 8 40. 2 39. 8 39. 5 39. 5 40. 8 40. 3 39. 9 40. 3 40. 1	\$1. 79 1. 92 1. 98 1. 98 1. 98 1. 98 2. 01 1. 99 2. 01 2. 02 2. 01 2. 01 2. 00 2. 04	77. 26 77. 38 77. 81 77. 82 77. 82 77. 42 78. 41 79. 40 79. 40 79. 80 80. 00 79. 80 81. 00 81. 00 81. 00	40. 9 40. 3 39. 7 39. 6 39. 6 39. 6 39. 7 39. 7 40. 0 40. 2 40. 1 50. 7	\$1. 84 1. 92 1. 96 1. 97 1. 97 1. 97 1. 97 2. 00 2. 00 2. 00 2. 02 2. 01 2. 02 2. 02 2. 02 2. 02 2. 02 2. 02	\$81. 80 83. 21 84. 19 84. 61 83. 74 83. 10 84. 10 86. 80 86. 97 85. 93 87. 64 87. 85 86. 58	40. 9 40. 2 39. 9 40. 1 39. 8 39. 2 39. 3 40. 0 40. 0 39. 8 39. 6 40. 2 40. 2 40. 3 39. 9	\$2.00 2.07 2.11 2.11 2.12 2.14 2.17 2.16 2.17 2.18 2.18 2.18 2.18 2.17	\$68, 88 70, 93 71, 50 69, 89 71, 74 72, 13 73, 63 72, 86 73, 23 76, 48 74, 70 76, 89 76, 52 75, 52	41. 0 40. 3 39. 5 38. 4 39. 2 39. 8 39. 6 39. 6 40. 6 40. 9 40. 7 39. 9 5	\$1. 68 1. 76 1. 81 1. 83 1. 84 1. 85 1. 84 1. 85 1. 88 1. 88 1. 88	\$75. 81 78. 74 78. 01 78. 01 76. 05 77. 23 75. 85 75. 27 76. 44 78. 80 79. 80 79. 80 79. 80 79. 80 80. 00 79. 20 81. 61	41. 2 40. 8 39. 8 39. 8 39. 2 39. 1 38. 8 39. 2 39. 8 40. 1 39. 6 40. 2 39. 8	\$1.84 1.93 1.96 1.96 1.97 1.94 1.94 1.98 1.99 1.99 1.99	\$74. 89 78. 67 77. 42 79. 20 74. 26 74. 26 75. 27 79. 70 81. 20 85. 90 87. 35 84. 26 81. 81 80. 00 81. 61	38. 6 40. 5 40. 4 41. 7 42. 2 41. 1 40. 5 30. 8	\$1. 54 1. 94 1. 95 1. 95 1. 98 1. 94 1. 95 1. 97 2. 06 2. 07 2. 05 2. 02 2. 01 2. 02
		Comm	ercial la leaning, ing maci	undry.		ng mach	ines	Refrige	rators as	nd air		llaneou		Fabric	aled pig	oe, fit-		nd roller ings	beur-
1965;	A verage. February Mareh April. May June July August September October November	\$76, 39 76, 56 78, 26 78, 11 78, 62 78, 85 74, 66 72, 10 78, 17 73, 42 74, 59 74, 15 74, 98 72, 60 73, 26	43. 9 42. 3 40. 9 40. 6 41. 1 41. 0 40. 3 39. 4 40. 2 39. 9 40. 1 40. 3 40. 3 39. 4	\$1. 74 1. 81 1. 84 1. 85 1. 84 1. 85 1. 85 1. 85 1. 86 1. 86 1. 86 1. 86 1. 86	976. 73 77. 01 79. 20 79. 60 79. 80 79. 80 79. 81 77. 82 77. 82 70. 20 80. 40 81. 81 81. 81 80. 00 80. 59	40. 6 39. 9 39. 8 40. 0 39. 8 40. 1 39. 5 39. 5 40. 2 40. 5 40. 5 30. 8 39. 7	\$1.89 1.43 1.99 1.49 1.09 1.09 1.98 1.98 1.98 1.98 1.98 2.00 2.00 2.01 2.03	\$76. 04 79. 70 79. 60 78. 61 78. 44 78. 01 75. 96 74. 69 75. 69 78. 21 79. 40 78. 80 80. 40 80. 20 83. 64	41. 1 40. 9 39. 7 39. 7 38. 8 39. 2 38. 9 38. 6 39. 3 39. 7 39. 4 40. 2 39. 9 41. 0	\$1. 85 1. 95 1. 95 1. 99 1. 98 1. 97 1. 95 1. 95 1. 96 1. 99 2. 00 2. 00 2. 00 2. 01 2. 04	\$78. 36 78. 85 78. 18 78. 18 76. 81 77. 60 77. 03 78. 80 78. 61 79. 90 80. 59 81. 59 81. 99	42. 1 41. 8 40. 3 40. 3 39. 8 40. 0 40. 1 39. 2 39. 8 39. 8 39. 7 40. 4 40. 7 41. 0	\$1. 79 1. 90 1. 94 1. 94 1. 94 1. 94 1. 95 1. 98 1. 98 1. 98 1. 99 1. 99	\$73.39 77.90 78.78.79.18 79.18 77.60 78.40 78.20 76.44 80.20 78.20 81.20 80.00 79.60	41. 7 41. 0 40. 4 40. 0 40. 0 40. 1 38. 6 38. 8 40. 1 39. 1 40. 4 40. 3	\$1. 76 1. 90 1. 96 1. 96 1. 94 1. 95 1. 95 1. 95 2. 00 2. 00 2. 01 2. 00 1. 99 1. 99	\$74. 57 77. 71 75. 85 75. 08 74. 50 74. 50 75. 46 74. 60 77. 42 78. 61 80. 60 83. 01 85. 24	41. 2 40. 9 39. 1 38. 9 38. 4 38. 8 39. 1 38. 5 39. 1 39. 7 40. 5 41. 3 42. 2	\$1. 81 1. 90 1. 94 1. 93 1. 92 1. 92 1. 93 1. 94 1. 98 1. 98 1. 98 1. 98 2. 01 2. 02
		Machin	nery (e	Con							Electric	cal macl	inery						
		Machi	ne shops	(fab		Electric linery	ai ma-	tribu	al gener mission, tion, an ial appa	dis-	Wiring	devices o supplies	md	Curton	and gr ts (elect	aphite rical)	Electric meas cord ment	cai ind suring, c ling is	icating, end re- setru-
1966:	A verage A verage February March April May June July August September November November January February	\$78. 85 80. 28 70. 49 79. 71 77. 74 79. 52 78. 55 78. 55 79. 38 79. 54 79. 96 81. 95 82. 35	43. 4 42. 7 41. 4 40. 7 41. 2 41. 1 40. 7 40. 5 41. 0 41. 6 41. 6 41. 6	\$1. 81 1. 58 1. 92 1. 95 1. 91 1. 93 1. 93 1. 93 1. 94 1. 95 1. 97 1. 97 1. 97	\$68.80 71.81 72.22 71.28 70.56 71.50 72.07 71.53 72.04 72.95 73.93 74.59 74.52 74.15	41. 2 40. 8 39. 9 39. 6 30. 2 39. 5 39. 5 39. 8 40. 1 40. 7 40. 5 40. 3	\$1. 67 1. 76 1. 81 1. 80 1. 81 1. 82 1. 82 1. 82 1. 83 1. 84 1. 84 1. 84	\$74. 40 77. 83 77. 88 76. 40 76. 45 76. 22 76. 61 76. 42 77. 78 78. 76 78. 76 79. 15 79. 56 78. 38	41. 8 41. 4 40. 3 40. 0 30. 5 39. 7 39. 8 40. 6 40. 6 40. 8 40. 8 40. 8	\$1. 78 1. 88 1. 92 1. 91 1. 91 1. 92 1. 92 1. 92 1. 92 1. 94 1. 94 1. 94 1. 95	864. 78 68. 84 67. 32 67. 49 65. 23 66. 08 66. 47 65. 79 67. 90 68. 85 69. 89 70, 58 71, 17 69. 03 69. 09	41. 0 40. 8 39. 6 39. 7 38. 6 39. 1 39. 1 38. 7 39. 8 40. 4 40. 6 40. 9 29. 9	\$1. 58 1. 68 1. 70 1. 70 1. 60 1. 70 1. 70 1. 72 1. 73 1. 73 1. 73 1. 73 1. 74 1. 73	\$75. 58 77. 83 76. 14 74. 43 74. 61 74. 83 74. 07 73. 89 74. 80 74. 96 74. 96 74. 96 74. 34 76. 67 77. 33	41. 3 41. 4 40. 5 39. 8 30. 9 39. 8 39. 4 39. 3 40. 0 40. 0 40. 3 41. 0 41. 0 41. 0	\$1. 83 1. 88 1. 88 1. 87 1. 87 1. 88 1. 87 1. 87 1. 87 1. 86 1. 86 1. 87	\$71. 48 73.87 73. 16 72. 25 71. 50 72. 44 72. 98 72. 58 73. 16 74. 52 74. 89 74. 15 71. 89 72. 65 72. 65	41. 8 41. 1 40. 2 39. 7 39. 8 40. 1 40. 1 40. 2 40. 5 40. 7 40. 3 39. 5 39. 9	\$1. 71 1. 79 1. 82 1. 82 1. 82 1. 82 1. 82 1. 84 1. 84 1. 84 1. 82 1. 83

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

									Man	ufacturi	ng-Co	ntinued							
								1	Sectrica	l machi	nery—(Continue	ed						
Y	eer and month		, general -peneral			r and di transfor		Switch	Agest, s and indi controls	witch- ustrial		trical we pparatu		Electri	cal app	liances	Ins	uinted v nd eabl	rire 0
		Avg. wkiy. esrn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. carn- ings	Avg. wkiy. earn- ings	Avg. wkly. hours	Avg. hrly. carn- ings	Avg. wkiy. earn- ings	Avg. wkly. bours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly, hours	Avg. hrly. carn- ings	Avg. wkly. carn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1982 1983 1984	Average February March April May June July August September October November	\$80, 22 84, 03 83, 23 82, 01 80, 59 81, 78 80, 99 81, 80 83, 64 85, 98 84, 87 84, 65 83, 84 84, 25 84, 25	42.0 41.6 40.6 40.2 30.7 39.6 30.7 40.6 41.1 41.0 40.8 40.5 40.7 40.9	2.04 2.04 2.06 2.06 2.07	\$72.04 76.33 76.24 78.20 78.44 79.19 78.50 77.09 78.98 76.14 79.76 80.77 84.58 81.95 82.98	40.5	\$1. 77 1. 88 1. 94 1. 95 1. 96 1. 97 1. 98 1. 98 1. 95 1. 97 1. 97	\$72. 16 78. 84 78. 48 74. 37 73. 66 74. 99 75. 36 76. 76 76. 78 79. 32 79. 13 76. 40 76. 99	42. 2 41. 9 40. 8 40. 2 39. 6 49. 1 40. 3 40. 1 40. 2 41. 1 41. 0 40. 0 60. 0	\$1. 71 1. 81 1. 85 1. 86 1. 87 1. 87 1. 89 1. 90 1. 91 1. 93 1. 93 1. 91	801, 28 85, 20 78, 39 80, 56 83, 73 81, 90 83, 42 83, 23 86, 48 87, 55 83, 64 84, 84 84, 84 84, 88	68. 1 62. 6 60. 2 61. 1 42. 5 41. 2 41. 5 42. 6 42. 5 41. 0 41. 2 42. 0 41. 1 42. 1	2.02	\$72, 92 76, 92 76, 92 76, 62 76, 22 74, 68 76, 43 76, 43 76, 43 76, 43 77, 78, 38 77, 81 76, 62	40, 4 40, 7 39, 8 39, 6 39, 7 30, 1 39, 3 39, 6 88, 2 40, 6 40, 4 40, 9 9, 9 39, 7	\$1, 79 1, 59 1, 91 1, 92 1, 92 1, 92 1, 93 1, 93 1, 95 1, 95 1, 95	\$72. 11 72. 24 60. 32 68. 57 69. 14 60. 77 70. 30 72. 39 72. 39 74. 82 73. 34 73. 34 73. 33	43. 7 42. 0 40. 3 40. 1 39. 4 40. 2 40. 1 40. 9 41. 7 41. 8 41. 4 41. 2 41. 3	\$1. 66 1. 72 1. 72 1. 72 1. 72 1. 72 1. 74 1. 74 1. 76 1. 77 1. 78 1. 78 1. 78
		1	ctric equ	ip-	Ele	etrie lan	npe		munica uipmen		Radios	, phonogrelation set	raphs, ds, nend	n	adio tub		Teleph at	one, tele nd relate puipmen	graph,
1988: A 1984: F 3 A N J J A S O N N I 1988: J	A verage. A verage. February March April. May June. July August. September October. November Jaouary February	\$72. 98 76. 70 75. 24 73. 39 78. 17 75. 26 73. 54 74. 10 81. 18 79. 59 79. 38 80. 78 85. 85	40. 1 40. 8 39. 6 39. 0 38. 4 40. 5 39. 2 38. 3 39. 0 38. 8 41. 0 40. 4 40. 5 40. 8 42. 5	\$1. 82 1. 88 1. 90 1. 88 1. 93 1. 92 1. 92 1. 92 1. 90 1. 97 1. 98 1. 97 1. 98 1. 97	\$58. 89 65. 21 65. 01 65. 24 64. 19 64. 85 63. 69 65. 63 67. 77 68. 51 68. 17 68. 74	39. 0 40. 5 39. 4 39. 3 38. 9 39. 3 38. 6 36. 4 38. 6 39. 3 40. 1 40. 3 40. 3 40. 1	\$1. 81 1. 61 1. 65 1. 65 1. 65 1. 65 1. 66 1. 67 1. 69 1. 70 1. 70 1. 70	364, 21 66, 66 67, 89 67, 89 68, 30 67, 42 68, 51 67, 64 69, 03 69, 55 70, 88 71, 23 70, 53 70, 53 70, 58	40. 9 40. 4 39. 7 39. 5 39. 0 39. 2 39. 6 39. 1 39. 9 40. 2 40. 5 40. 7 40. 3 40. 3	\$1. 67 1. 68 1. 71 1. 71 1. 73 1. 73 1. 73 1. 73 1. 75 1. 75 1. 75 1. 75 1. 75	962. 12 64. 64 67. 00 65. 35 60. 00 67. 32 67. 20 67. 30 69. 32 69. 36 69. 32 69. 32 69. 32 69. 32 69. 32 69. 32	40. 6 39. 9 39. 7 39. 4 38. 9 39. 1 39. 6 39. 8 40. 2 40. 3 40. 3 40. 3 39. 7	11. 53 1. 62 1. 69 1. 69 1. 68 1. 69 1. 70 1. 71 1. 70 1. 72 1. 72 1. 72 1. 72 1. 72	\$57, 40 62, 27 61, 78 61, 39 62, 65 63, 27 61, 99 64, 98 63, 90 67, 49 64, 06 64, 06 65, 76	40, 2 40, 7 39, 1 39, 5 39, 4 39, 3 38, 5 40, 6 40, 9 39, 6 40, 9 39, 6 40, 1	\$1. 43 1. 53 1. 58 1. 57 1. 59 1. 61 1. 61 1. 62 1. 65 1. 65 1. 64	\$82, 49 79, 38 78, 99 77, 63 78, 41 79, 40 78, 21 80, 60 81, 60 83, 43 64, 66 83, 64 85, 90 86, 73	43, 4 42, 3 40, 5 40, 5 30, 8 30, 9 30, 8 41, 1 41, 2 41, 7 41, 9	\$1. 88 1. 95 1. 95 1. 96 1. 95 1. 97 1. 98 2. 00 2. 00 2. 03 2. 04 2. 03 2. 06 2. 07
					E	lectrical	machin	ery-C	ontinue	1					Trans	portatio	a equip	ment	
		Misce	llaneous I produc	elec-	Store	ape batte	ries	Print (dr	ery batte y and we	erice (t)	X-ray elect	and non	radio bes	Total:	Transp equipm	orta- ent	Aut	omobile	
1952; 1953; 1954;	A verage. A verage. February. March. April. May. June. July. August. September. October. November. January. February.	968, 96 67, 94 60, 60 69, 13 58, 73 67, 51 69, 52 68, 43 67, 25 67, 82 69, 48 70, 96 70, 53 70, 17 72, 76	40. 7 40. 2 40. 0 39. 5 39. 5 39. 5 39. 1 39. 1 39. 2 39. 7 40. 1 39. 2 40. 2	\$1. 62 1. 69 1. 74 1. 75 1. 74 1. 76 1. 75 1. 75 1. 75 1. 75 1. 77 1. 79 1. 79 1. 81	\$73. 34 76. 67 76. 90 74. 69 75. 66 79. 00 76. 24 75. 66 75. 66 78. 60 81. 80 77. 64 81. 80	41. 2 41. 0 40. 1 38. 9 39. 5 39. 2 40. 1 39. 3 39. 3 39. 0 39. 9 40. 9 39. 4 40. 9	\$1. 78 1. 87 1. 92 1. 92 1. 92 1. 92 1. 97 1. 94 1. 91 1. 94 1. 97 2. 00 1. 97 2. 00 2. 00	\$54, 66 59, 29 60, 80 60, 28 57, 91 59, 19 58, 36 58, 26 58, 35 58, 20 58, 20 59, 74 60, 83	30. 9 40. 0 40. 0 39. 7 39. 4 38. 1 39. 2 38. 9 38. 8 38. 8 38. 8 38. 8 38. 9 39. 3	\$1. 42 1. 45 1. 62 1. 53 1. 63 1. 72 1. 51 1. 50 1. 50 1. 50 1. 50 1. 50 1. 50 1. 52 1. 54	\$72. 93 72. 36 77. 74 80. 37 77. 59 76. 62 79. 79. 60 78. 41 79. 00 78. 98 81. 16 77. 03 79. 19	42. 9 40. 2 40. 7 41. 4 40. 2 39. 7 40. 3 40. 0 39. 8 40. 1 40. 5 41. 3 40. 2	\$1. 70 1. 80 1. 91 1. 92 1. 93 1. 93 1. 98 1. 97 1. 97 1. 97 1. 97 1. 95 1. 97	\$81, 14 85, 28 84, 82 84, 21 84, 82 85, 67 84, 50 84, 38 85, 63 86, 00 87, 26 90, 91, 98 91, 98 92, 84	41. 4 41. 2 40. 2 40. 2 40. 6 39. 9 39. 8 40. 0 41. 7 42. 5 42. 0 42. 2	\$1. 95 2. 07 2. 11 2. 10 2. 11 2. 12 2. 12 2. 12 2. 13 2. 15 2. 16 2. 18 2. 19 2. 20	\$82, 82 87, 95 85, 72 84, 95 88, 96 88, 34 85, 28 85, 00 89, 16 90, 54 90, 54 96, 75 96, 75	40, 6 41, 1 39, 5 39, 5 40, 6 40, 9 39, 3 39, 2 40, 0 30, 8 40, 6 42, 9 44, 0 43, 0 43, 7	52.04 2.14 2.17 2.18 2.16 2.16 2.17 2.20 2.24 2.23 2.25 2.25 2.25 2.25
		Motor s parts, a	ehicles, l ind acces	bodice, mories		ek and b bodies	N.F	Traile	re (truck tomobile	and	Als	reraft an parts i	d		Aircraft		Airera	ft engine parts	s and
	Average Average February March April May June July August September October November January February	\$83, 64 88, 78 86, 11 88, 10 88, 10 88, 07 80, 16 85, 95 86, 57 88, 58 91, 25 97, 18 100, 11 97, 63 99, 43	40. 6 41. 1 30. 5 39. 4 40. 4 40. 9 39. 2 39. 3 39. 9 40. 6 43. 0 44. 1 43. 2 43. 8	\$2.06 \$16 \$16 \$2.18 \$2.19 \$2.19 \$2.19 \$2.22 \$2.20 \$2.25 \$2.25 \$2.27	\$70. 18 74. 26 72. 59 74. 96 77. 08 77. 71 74. 10 76. 09 76. 80 76. 80 76. 82 81. 32	40. 8 40. 8 30. 8 40. 3 41. 0 40. 9 39. 0 41. 1 39. 7 29. 7 40. 0 40. 0 40. 0 41. 1 30. 6 41. 7	\$1. 72 1. 82 1. 84 1. 84 1. 86 1. 88 1. 90 1. 90 1. 90 1. 90 1. 90 1. 92 1. 91 1. 92 1. 94 1. 94	\$70. 82 73. 60 73. 49 72. 65 76. 17 78. 91 74. 29 79. 49 82. 12 82. 82 82. 82 81. 56	41. 0 40. 0 30. 3 39. 4 41. 1 39. 1 39. 2 38. 7 41. 4 41. 9 42. 5 40. 3 41. 4	\$1. 72 1. 84 1 87 1. 85 1. 84 1. 89 1. 92 1. 90 1. 93 1. 92 1. 96 1. 95 1. 94 1. 97	\$81, 70 83, 80 85, 28 84, 45 83, 43 83, 84 84, 66 84, 66 87, 27 85, 68 87, 34 87, 95	43. 0 41. 9 41. 2 41. 0 40. 8 40. 8 40. 8 40. 7 41. 2 41. 2 41. 5 41. 5	\$1. 50 3.00 2.07 3.06 2.06 2.06 2.08 2.08 2.10 2.10 2.12 2.12 2.12 2.14 2.14	879, 66 82, 19 85, 49 84, 67 83, 22 83, 84 84, 85 84, 85 85, 67 85, 47 87, 77 87, 77 87, 77 89, 44 88, 58	42. 6 41. 3 41. 3 41. 4 40. 7 40. 8 40. 9 40. 9 40. 7 41. 4 41. 4 41. 6 41. 2	81. 87 1. 99 2.07 2.06 2.06 2.06 2.08 2.08 2.10 2.10 2.10 2.12 2.12 2.15 2.15	\$85, 92 87, 29 85, 28 84, 24 83, 84 83, 42 84, 65 86, 51 86, 10 84, 63 85, 46 87, 54 86, 69	43. 9 43. 0 41. 0 40. 5 40. 5 41. 0 41. 0 40. 3 40. 5 41. 1 40. 7	\$1. 98 2.08 2.08 2.08 2.07 2.07 2.10 2.10 2.10 2.11 2.12 2.13 2.13 2.13

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees 1—Continued

		-					1	Manufact	turing—(Continue	d					
		Aleena	ft propail		CHA	r aircraft		portation	equipment boot b		-	phylidina	and	Pos	dbuilding	and
	Year and month	Airera	paris	err and	45	d squipm	eni		i repairir		CORT	repairing	,	2700	repairing	-
		Avg. wkiy. earn- ings	Avg. wkiy. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hriy. earn- ings	Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. earn ings	Avg. wkly. earn- ings	Avg. wkiy. hours	Avg. hrly. earn- ings
1982: 1983: 1964:		892. 28 85. 90 84. 04 85. 67 82. 76 79. 87 80. 26 79. 87 80. 26 83. 35 83. 35 83. 37 84. 21 84. 21 83. 60	45. 0 41. 9 40. 6 39. 6 38. 4 38. 4 38. 3 39. 5 39. 7 40. 1 40. 0	22.05 2.05 2.07 2.11 2.09 2.08 2.10 2.11 2.10 2.11 2.10 2.10 2.10 2.10	\$81. 22 86. 17 84. 04 84. 05 83. 86 85. 05 84. 87 83. 84 84. 85 86. 10 87. 34 87. 98 90. 09	43. 2 42. 8 41. 4 41. 2 40. 9 41. 3 41. 2 40. 6 41. 0 41. 2 41. 5	\$1. 88 1. 96 2. 03 2. 04 2. 05 2. 06 2. 06 2. 07 2. 00 2. 10 2. 12 2. 12 2. 14 2. 13	\$75. 58 79. 37 81. 12 81. 95 80. 70 80. 65 80. 11 81. 12 78. 83 80. 85 80. 22 83. 10 82. 74	40. 2 86. 1 39. 4 38. 8 39. 1 38. 1 38. 1 38. 0 37. 9 38. 5 38. 5 38. 2 39. 4	\$1.88 2.03 2.06 2.06 2.07 2.07 2.05 2.07 2.05 2.10 2.10 2.12 2.12 2.10	\$76. 78 80. 91 83. 25 84. 28 82. 18 82. 82 82. 64 82. 22 83. 03 80. 09 82. 51 81. 86 85. 36	40. 2 38. 9 38. 9 39. 2 38. 4 38. 7 38. 8 38. 8 37. 6 38. 2 37. 9 38. 2	\$1. 91 2. 08 2. 14 2. 15 2. 14 2. 13 2. 13 2. 14 2. 16 2. 16 2. 20 2. 18 2. 19	965. 23 70. 58 70. 45 70. 69 71. 58 72. 34 71. 23 68. 95 71. 05 71. 82 70. 49 71. 51 70. 75	36. 9 40. 1 39. 8 40. 3 40. 9 41. 1 40. 7 39. 4 40. 2 39. 9 39. 6 41. 1 40. 3	\$1.66 1.77 1.77 1.77 1.77 1.77 1.78 1.78 1.78
	February	84. 38	39.8	2.12	87.97	41.3	2.13	82.11	39. 1	2.10	84, 97	38.8	2.19	70. 12		
					T	masports	tion equ	dpment-							products	
			Kallroad julpmen		Los	parts	and	R	ailread a streetcare	nd .	Other	transpor quipmer	rtation at		instrume ted prod	
1963: 1964: 1966:	February Mareh April May June June July August September October November December	\$77. 33 80. 39 81. 96 81. 98 80. 08 80. 85 81. 46 80. 60 81. 79 78. 02 82. 51 86. 88 87. 83	40. 7 39. 5 39. 5 38. 5 38. 5 38. 6 38. 2 38. 4 36. 8 38. 2 40. 4	\$1.60 2.03 2.10 2.09 2.10 2.11 2.11 2.13 2.12 2.16 2.18 2.20 2.19	\$\$1. 14 82. 00 84. 21 82. 97 81. 97 82. 78 85. 22 84. 38 86. 43 78. 81 83. 71 86. 40 89. 38 86. 51	41. 4 40. 0 40. 1 39. 7 39. 6 39. 8 40. 2 37. 0 39. 3 40. 0 41. 0 40. 6	\$1.95 2.05 2.10 2.09 2.07 2.08 2.12 2.12 2.13 2.13 2.16 2.18 2.18 2.19	\$74.00 79.19 82.11 81.30 78.79 79.13 78.33 78.70 78.49 77.23 81.38 87.35 88.40 87.34	40. 0 39. 4 39. 1 38. 9 37. 7 37. 3 37. 3 37. 3 37. 2 36. 6 37. 5 39. 9 40. 0 39. 7	\$1.85 2.01 2.00 2.00 2.11 2.11 2.11 2.11 2.11	\$73. 62 73. 49 71. 31 71. 31 71. 16 73. 38 77. 27 71. 97 74. 43 74. 40 71. 23 70. 86 71. 19 75. 14	42. 7 40. 6 39. 4 39. 4 39. 1 40. 3 41. 1 38. 9 39. 8 40. 0 38. 5 38. 9 40. 4	\$1. 71 1. 81 1. 81 1. 82 1. 82 1. 88 1. 85 1. 86 1. 85 1. 85 1. 85	\$72.67 73.69 73.12 72.76 72.07 72.67 72.83 72.29 73.82 74.19 74.56 75.33 74.96	41. 0 41. 4 40. 4 40. 2 39. 6 39. 8 39. 8 39. 8 39. 8 40. 1 40. 3 40. 5 40. 3	\$1. 77 1. 81 1. 81 1. 82 1. 82 1. 83 1. 83 1. 85 1. 86
	February	and	a9. 5 tory, sei	ing	and	40.3	suring		39.0		54.74 Surgion	40. 4	al, and	75.74 Ophi	40.5	1. 87 mods
			strumen	Le	to	strumen								_		
1962: 1983: 1964: 1966:	Average Average February March April May June July August September October November December January February	\$63. 11 89. 26 83. 23 83. 43 82. 18 81. 56 82. 59 70. 72 82. 59 84. 63 84. 63 86. 30 87. 97 96, 92 88. 60	45. 2 42. 5 40. 8 39. 7 39. 4 39. 9 40. 3 40. 3 40. 9 41. 3 41. 4	\$3.06 2.10 2.06 2.06 2.07 2.07 2.06 2.07 2.10 2.10 2.11 2.13 2.12 2.14	74. 16 74. 16 74. 70 74. 12 73. 60 73. 60 74. 77 74. 24 72. 54 74. 25 75. 39 75. 58 77. 49 75. 79	42. 4 41. 2 40. 5 40. 5 40. 0 40. 0 40. 2 30. 7 39. 0 39. 5 40. 1 40. 2 41. 0 40. 1 40. 3	1. 80 1. 80 1. 84 1. 83 1. 84 1. 86 1. 87 1. 86 1. 88 1. 88 1. 88 1. 89 1. 89	76. 68 79. 00 73. 38 73. 20 73. 65 74. 52 75. 41 74. 64 73. 68 76. 73 76. 78 78. 31 78. 09 76. 38 76. 00	42.6 42.7 40.0 30.7 40.5 39.7 39.4 40.6 40.6 41.0 41.1 40.2 40.0	\$1.80 1.85 1.83 1.83 1.84 1.89 1.89 1.87 1.89 1.90 1.90 1.90	64. 68 66. 74 67. 73 67. 23 66. 30 65. 97 67. 13 65. 97 67. 47 67. 13 65. 46 66. 47 67. 13 67. 30 67. 70	41. 2 41. 2 40. 8 40. 8 39. 7 20. 5 40. 2 39. 5 40. 4 40. 2 39. 8 40. 2 40. 3	\$1. 57 1. 62 1. 66 1. 67 1. 67 1. 67 1. 67 1. 67 1. 67 1. 67 1. 67 1. 67	\$56. 63 58. 69 58. 76 58. 71 58. 20 58. 50 58. 35 56. 70 59. 65 59. 04 59. 70 58. 65 59. 55	39. 6 40. 2 39. 4 38. 8 38. 9 37. 8 39. 5 39. 1 39. 4 39. 1 39. 7	\$1. 43 1. 46 1. 48 1. 50 1. 50 1. 50 1. 51 1. 51 1. 50 1. 50 1. 50
					l product						aneous m					
		Ph	otograph pparatus	le	W	clocks	d	Total:	M iscella		and p	ry, sliver plated w	are '		indings	4
1983: 1964:	A verage A verage February March April May June July August Restember October November December January February	\$76. 78 77. 49 80. 57 79. 98 79. 99 79. 79 80. 98 79. 59 79. 79 80. 60 81. 60 82. 01 82. 82 82. 82	41. 7 41. 0 40. 9 40. 6 40. 4 40. 5 40. 3 40. 6 40. 8 40. 8 40. 8	\$1. 84 1. 80 1. 97 1. 97 1. 98 1. 98 1. 98 1. 97 1. 97 2. 00 2. 00 2. 00 2. 01 2. 02 2. 02	\$60. 58 66. 98 64. 30 64. 62 62. 43 82. 36 61. 66 63. 69 63. 91 65. 97 67. 06 65. 74 66. 63 66. 42 67. 26	40. 1 41. 6 30. 5 30. 4 38. 3 38. 6 38. 6 38. 5 40. 4 39. 6 30. 3 30. 3 30. 8	\$1. 51 1. 61 1. 63 1. 64 1. 63 1. 64 1. 65 1. 66 1. 67 1. 66 1. 67 1. 66 1. 67 1. 69 1. 69	\$61. 50 64. 06 64. 16 64. 00 62. 72 63. 43 63. 36 62. 79 63. 84 64. 40 65. 21 65. 21 65. 21 65. 33 65. 58	41. 0 40. 8 40. 1 40. 0 39. 2 39. 4 39. 6 39. 0 39. 9 40. 5 40. 5 40. 5 40. 6	\$1. 80 1. 57 1. 60 1. 60 1. 60 1. 61 1. 61 1. 61 1. 61 1. 61 1. 63 1. 64	955. 99 68. 85 68. 22 67. 24 66. 69 66. 95 64. 06 66. 25 70. 05 71. 71 71. 81 77. 48 67. 82 68. 39	42.8 42.5 41.6 41.0 40.3 40.4 39.3 40.9 42.2 43.2 43.0 42.8 41.1	\$1. 56 1. 62 1. 64 1. 64 1. 63 1. 63 1. 63 1. 62 1. 66 1. 67 1. 66 1. 67	\$63, 33 65, 41 64, 95 64, 12 63, 34 62, 93 60, 30 62, 58 66, 99 68, 89 68, 37 67, 56 64, 53 65, 36	42.5 42.2 41.9 41.1 40.6 40.6 38.9 40.9 42.4 43.6 43.0 42.5 41.1	\$1. 40 1. 55 1. 55 1. 56 1. 56 1. 55 1. 55 1. 58 1. 58 1. 58 1. 59 1. 59

TABLE C-1: Hours and gross earnings of production workers or nonsupervisory employees i-Continued

		1					A	fanufaet	uring-C	ontinued	1					
						Miscel	llaneous	manufac	turing in	dustries	-Continu	ied				
	Year and month	Silveru	are and ware	plated	Music	d instr and part	uments s	Toys	and goods	sporting	Games,	toys, de tren's sel	ills, and licles	Sportin	g and goods	aiblette
		Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly. enrn- ings	Avg. wkiy. enrn- ings	Avg. wkly. hours	Avg. hrly. earn- ings	Avg. wkiy. enrn- ings	Avg. wkiy. hours	Avg. hriy. earn- ings	Avg. wkly. earn ings	Avg. wkly. hours	Avg. briy. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. hrly. earn- ings
1962 1963 1964	A verage February March April May June	\$70. 81 78. 86 73. 98 73. 03 70. 27 71. 60 70. 62 71. 02 74. 03	41. 0 43. 1 41. 1 40. 8 39. 7 40. 0 39. 9 30. 9 41. 9 42. 2 43. 1 43. 3 41. 2	\$1.69 1.78 1.80 1.79 1.77 1.79 1.77 1.81 1.83 1.84 1.83 1.84 1.83	\$68.64 71.51 70.40 69.13 67.90 67.06 71.06 70.88 71.20	41. 1 40. 8 40. 0 39. 5 38. 1 39. 7 39. 7 39. 6 40. 0 41. 2 42. 2 42. 1 41. 8 40. 6	\$1.67 1.76 1.76 1.75 1.75 1.76 1.70 1.79 1.78 1.82 1.84 1.83	\$58. 73 60. 70 60. 80 50. 98 87. 76 59. 04 87. 66 86. 77 58. 41 58. 50 59. 40 58. 50 58. 74	40. 5 40. 2 38. 9 39. 2 38. 0 39. 1 38. 7 38. 1 39. 2	\$1. 45 1. 51 1. 85 1. 83 1. 52 1. 51 1. 49 1. 49 1. 50	\$58. 64 61. 35 60. 63 61. 15 58. 82 50. 13 57. 28 56. 00 55. 31	40, 3 40, 1 38, 5 39, 2 38, 9 38, 7 37, 9 39, 4 39, 1 39, 0 38, 2	\$1.46 1.53 1.56 1.56 1.54 1.52 1.48 1.48 1.49	\$58. 90 60. 35 59. 49 56. 65 56. 77 58. 71 58. 20 67. 98 56. 74 58. 98 59. 58 59. 58	40, 0 40, 8 39, 4 39, 1 38, 1 39, 4 38, 8 38, 4	\$1. 44 1. 81 1. 80 1. 41 1. 45 1. 51
1955:	August September October November December January February	70. 62 71. 02 74. 03 76. 68 77. 65 78. 87 79. 67 74. 57 75. 35	42.2 43.1 43.3 41.2 41.4	1.84 1.83 1.84 1.81 1.82	71. 06 70. 88 71. 20 74. 96 77. 65 77. 04 76. 49 73. 08 74. 62	42. 2 42. 1 41. 8 40. 6 41. 0	1. 84 1. 83 1. 83 1. 80 1. 82	59. 40 58. 50 58. 74 59. 52 60. 21	38. 1 39. 2 39. 0 39. 6 30. 0 38. 9 38. 9 39. 1	1. 50 1. 50 1. 51 1. 53 1. 54	58. 26 59. 45 58. 50 57. 68 59. 75 60. 06	39. 9 39. 0 38. 2 38. 8 39. 0	1. 49 1. 50 1. 51 1. 54 1. 54	59, 58 89, 04 59, 80 59, 28 59, 98	38. 4 38. 9 38. 8 39. 2 39. 1 30. 6 30. 0 30. 2	1, 80 1, 80 1, 81 1, 81 1, 82 1, 83
						Mans	afseturio	g-Cont	inued					Trans	portatio blie utili	n and
				1	Miscellar	eous ma	nufactur	ing indu	stries-C	ontinued	1			pu	blie utili	tles
		Pens, p	encils, an	d other	Costun	se jeweir	y, but-	Fabric	ated plast	tie prod-	Other	manuf	eturing	Clas	I railro	ade t
1952:	Average	\$57 98		41 40	\$55.74	ns, notio	\$1.39	\$64.79	meta 41.8	\$1.55	469 00	ndustrie 40. 8	\$1.82	874.30	40.6	\$1.80
1943: 1954:	A vernige. February. March A pril May June. July A ugust September. October. November December. January	\$57, 36 58, 98 61, 90 60, 79 61, 61 61, 31 61, 05 59, 35 60, 45 62, 56 63, 76 61, 50 61, 46	40. 9 40. 4 41. 2 40. 8 40. 8 40. 7 30. 8 40. 1 40. 3 40. 9 41. 4 41. 0 40. 7	1. 46 1. 50 1. 49 1. 51 1. 50 1. 49 1. 48 1. 50 1. 53 1. 54 1. 50	\$55, 74 50, 09 87, 67 87, 82 85, 63 56, 48 87, 77 86, 21 56, 74 56, 50 87, 77 57, 82 58, 88 59, 54	40. 1 40. 2 39. 8 39. 6 38. 1 39. 3 38. 5 39. 4 38. 7 39. 3 30. 6 40. 4 40. 5 40. 6	1. 47 1. 46 1. 46 1. 47 1. 47 1. 46 1. 44 1. 46 1. 47 1. 46 1. 47	\$64. 79 67. 97 67. 06 67. 40 66. 86 67. 20 67. 60 68. 61 60. 36 69. 53 70. 38 71. 04 70. 76 72. 21	41. 8 41. 7 40. 4 40. 6 39. 4 39. 8 40. 0 40. 6 40. 8 40. 9	1. 63 1. 66 1. 66 1. 68 1. 68 1. 69 1. 70 1. 70 1. 70 1. 70 1. 70 1. 73 1. 73	64, 80 66, 00 66, 49 65, 18 66, 30 65, 35 66, 63 66, 57 66, 40 68, 51 68, 63	40. 8 40. 0 40. 0 39. 8 39. 7 38. 9 39. 9 40. 1 40. 3 39. 9	1.60 1.65 1.66 1.67 1.67 1.68 1.67 1.66 1.66 1.70 1.70	874. 30 76. 33 79. 18 78. 66 78. 50 76. 96 79. 84 77. 89 79. 10 80. 32 78. 38 80. 90 81. 64	40.6 40.4 41.4 41.1 39.3 41.8 40.2 41.2 41.4 40.4 41.7 42.3	\$1, 83 1, 88 1, 96 1, 90 1, 91 1, 94 1, 92 1, 94 1, 94 1, 94
	February	63. 12	41.8	1. 51	59. 68	40,6	1.47		41.5		68, 91 Contin	40.3	1.71			*****
		-					1 Limiteday	reasion as	na baom		niention	ded .		-		
		Local	ratiwayı ustines	and	7	Celephon		Bwitch	board of	erating	Line o	onstructi	on, in- mainte-	7	[elegrapi	•
1983: 1983: 1984:	A verage A verage Pebruary March April Muy June July August September October November January February	876, 56 77, 12 77, 25 77, 33 77, 58 77, 74 79, 10 78, 51 78, 26 78, 14 78, 32 77, 78 79, 63 79, 24	46. 4 45. 1 43. 2 43. 1 43. 7 42. 9 43. 0 42. 5 42. 5 42. 5 42. 6	\$1. 65 1. 71 1. 78 1. 79 1. 80 1. 80 1. 83 1. 82 1. 83 1. 83 1. 83 1. 83	651, 22 65, 02 65, 74 65, 70 66, 09 67, 38 68, 60 67, 69 71, 60 72, 04 72, 65 70, 74 69, 63	38, 5 38, 0 38, 2 38, 2 38, 5 38, 7 39, 2 38, 9 40, 9 39, 8 39, 7 39, 3 39, 0	\$1. 59 1. 68 1. 73 1. 73 1. 73 1. 75 1. 74 1. 75 1. 74 1. 83 1. 80 1. 80 1. 79	\$51. 43 54. 39 54. 36 53. 64 54. 00 56. 39 57. 15 56. 47 58. 04 60. 86 56. 83 56. 89 57. 04	37. 0 36. 0 36. 0 36. 3 37. 1 37. 4 38. 0 37. 8 36. 9 36. 9	\$1.39 1.47 1.51 1.49 1.49 1.52 1.52 1.51 1.55 1.55 1.55	986, 51 92, 23 92, 87 93, 91 93, 46 93, 88 94, 78 96, 95 95, 18 105, 77 104, 13 104, 08 103, 66 98, 41 98, 87	42. 2 42. 5 41. 7 42. 3 42. 1 42. 1 42. 3 42. 9 42. 9 44. 5 44. 1 44. 3 44. 3	\$2.08 2.17 2.22 2.22 2.22 2.23 2.24 2.26 2.26 2.26 2.26 2.34 2.34 2.36 2.34 2.31	**72. 48 74. 23 73. 69 73. 75 75. 78 75. 78 77. 15 77. 15 77. 15 77. 83 77. 93 78. 31 76. 78 77. 00 76. 82	43. 4 41. 7 41. 4 41. 2 42. 1 42. 1 41. 7 41. 8 41. 8 41. 5 41. 4 41. 3	* \$1. 67 1. 78 1. 78 1. 79 1. 80 1. 85 1. 85 1. 86 1. 86 1. 86 1. 86
		Transp	ortation	and					Who	lessie an	d retail to	nde				
		-	public u	-						***************************************	Re	tall trad	le	***************************************		
		Total:	Gas and e	-	Wb	alesale tr	ade	Retail eating places	and de	(except rinking	General	merck	andise	Departn	neni sin ai mai	res and
982: 943: 954:	A verage. A verage February. March April May June July August September October November Desember January	\$75, 12 90, 51 91, 97 80, 77 90, 77 91, 59 82, 40 83, 83 83, 43 85, 49 86, 94 86, 28 84, 27 86, 28	41. 5 41. 5 41. 1 41. 0 41. 0 41. 2 41. 8 41. 3 41. 7 42. 0 41. 4 40. 9	\$1. 81 1. 94 1. 97 1. 97 1. 97 1. 99 2. 00 2. 02 2. 02 2. 05 2. 05 2. 06 2. 06 2. 06	\$67. 80 71. 69 72. 36 72. 76 73. 16 73. 93 74. 34 74. 74 74. 74 75. 80 75. 55	40. 6 40. 5 40. 2 40. 2 40. 4 40. 4 40. 4 40. 4 40. 5 40. 6 40. 6 40. 6	\$1. 67 1. 77 1. 80 1. 81 1. 82 1. 83 1. 83 1. 84 1. 85 1. 85 1. 85 1. 85 1. 85	\$52 67 \$5 92 \$5 91 \$5 91 \$5 91 \$6 41 \$7 38 \$8 51 \$8 36 \$7 92 \$7 18 \$6 50 \$6 88 \$7, 72 \$7, 72 \$7	39, 9 39, 3 39, 1 39, 1 39, 1 30, 9 36, 3 39, 7 39, 2 38, 9 38, 9 38, 7 39, 5	\$1. 32 1. 40 1. 43 1. 43 1. 45 1. 46 1. 47 1. 47 1. 47 1. 47 1. 47 1. 47 1. 46 1. 48	\$38. 41 38. 96 29. 90 40, 13 39. 76 39. 91 41. 30 42. 25 41. 76 40. 83 40. 48 40. 14 41. 92 41. 65 41. 65	35. 9 35. 1 36. 0 35. 2 35. 5 34. 7 35. 3 36. 2 36. 0 36. 0 37. 1 36. 3 36. 4	\$1. 07 1. 11 1. 14 1. 14 1. 12 1. 15 1. 17 1. 16 1. 16 1. 16 1. 16 1. 16 1. 18	344. 77 44. 88 45. 47 45. 49 45. 74 45. 82 47. 06 47. 32 46. 93 46. 41 46. 06 49. 15 47. 03 46. 57	37. 0 35. 9 35. 9 36. 1 36. 3 35. 8 36. 4 36. 4 36. 7 38. 7 38. 4 35. 7	\$1. 21 1. 25 1. 27 1. 28 1. 28 1. 30 1. 30 1. 30 1. 30 1. 30 1. 30 1. 30 1. 30

Table C-1: Hours and gross earnings of production workers or nonsupervisory employees 1-Continued

							Whole	mie and e	etail trad	e-Con	tinued					
								Retail tra	de-Cor	itinoed						
												0	ther ret	ail trade		
	Year and month	Food an	d lique	r stores	Automot	e dealer		Apparel	stores	escries	Purnitu	re and ap	pliance	Lumber	and he	
		Avg. wkly. earn- ings	Avg. wkly. hours	Avg. hrly, earn- ings	WKIY.	Avg.	Avg. hrly. earn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. hrly. esm- ings	Avg. wkiy. enra- ings	Avg. wkly. hours	Avg. hrly. enrn- ings	Avg. wkly. enrn- ings	Avg. wkly. hours	Avg. hrty. earn- ings
1963		58, 89 80, 60 50, 75 50, 75 59, 82 60, 92 62, 57 62, 09 61, 53 60, 80 61, 24	30. 8 30. 0 38. 2 38. 3 38. 3 36. 8 30. 6 30. 3 38. 7 38. 4 38. 4 38. 4	\$1. 42 1. 51 1. 56 1. 56 1. 57 1. 57 1. 57 1. 58 1. 59 1. 60 1. 61	\$70. 06 73. 92 72. 82 73. 26 74. 76 75. 78 76. 37 76. 37 76. 70 76. 14 74. 70 76. 37 75. 68 76. 91	45, 2 44, 8 44, 4 44, 5 44, 5 44, 4 44, 4 44, 2 44, 2 44, 2 44, 2 44, 4 44, 4 44, 0 44, 2	\$1.55 1.65 1.64 1.65 1.71 1.72 1.72 1.71 1.09 1.70 1.69 1.72 1.72 1.72	843. 68 44. 96 46. 18 45. 80 46. 37 46. 81 47. 29 47. 05 46. 51 46. 95 46. 68 48. 28 47. 08 46. 15	35, 8 36, 4 35, 5 36, 5 36, 5 36, 1 36, 2 35, 5 36, 3 36, 3 36, 3 36, 3 36, 3 36, 3 36, 4 35, 5	\$1, 22 1, 27 1, 30 1, 29 1, 31 1, 30 1, 31 1, 30 1, 31 1, 33 1, 33 1, 33 1, 33 1, 33	\$51, 06 62, 31 61, 89 62, 46 62, 31 62, 73 63, 30 64, 30 64, 30 64, 90 64, 90 66, 81 65, 30 66, 45	42. 7 42. 1 42. 1 42. 2 42. 1 42. 2 42. 3 42. 0 42. 0 42. 1 42. 2 42. 2 42. 2 42. 2 42. 4 42. 4	\$1, 43 1, 48 1, 47 1, 48 1, 49 1, 50 1, 52 1, 52 1, 54 1, 55 1, 54 1, 55 1, 54 1, 52	\$61, 19 54, 65 65, 33 66, 22 67, 39 67, 70 67, 86 68, 45 67, 98 68, 85 67, 94 67, 78 66, 41 56, 57	43. 4 43. 1 42. 7 42. 7 43. 0 43. 2 43. 4 43. 5 43. 8 43. 8 44. 8 45. 8	\$1. 41 1. 50 1. 53 1. 53 1. 54 1. 56 1. 56 1. 57 1. 57 1. 59 1. 58 1. 58 1. 58 1. 57 1. 58
		Finance,	insuran	oe, and	real estate H	1	,	,	- 1	Service	and mise	ellaneous		- 1		
		Banks an	a Bee	eurity							Person	al service	18			otion-
		trust com panies	deal	ere and hanges	Insurance	Hote	ola, year	round w		Laund	ries	Cles	ning and	d dyeing	duct	ion and tribu- on ¹⁸
		Avg. wkly. earnings	W	vg. kly. nings	Avg. wkly. earnings	Avg. wkly. earn- ings	Avg wkly hour	nriy.	Avg. wkiy earn- ings	Avg wkly hour	nriy.	wkly.	Avg. wkly hour	Driy.	w	vg. kly. nings
1982; 1983; 1984;	A verage A verage February March April May June July August Scotter Cottober November December January February	\$52. 5 84. 8 86. 7 56. 4 88. 7 57. 6 87. 6 87. 6 87. 7 88. 6 88. 5 88. 5		\$81, 08 82, 94 86, 57 86, 57 89, 09 92, 09 91, 53 92, 97 94, 89 97, 75 97, 24 100, 09 111, 75 110, 82 112, 73	963, 38 67, 29 68, 66 69, 06 68, 99 69, 78 71, 13 71, 10 70, 68 70, 90 71, 29 71, 29 71, 44	\$37, 06 38, 40 39, 90 39, 81 39, 63 40, 13 40, 13 40, 14 40, 87 41, 16 41, 28 41, 26	42. 42. 41. 41. 41. 41. 41. 41. 41. 42. 42.	2 91 0 95 9 95 9 95 8 97 9 95 8 96 7 96 8 96 9 97 7 98 9 98 8 99 9 98	40, 84 40, 34 40, 56 40, 00 39, 44 40, 56 40, 46 40, 70 40, 44	40. 39. 30. 40. 40. 40. 40. 40. 40. 40. 40. 40. 4	8 1.00 6 1.00 4 1.01 3 1.01 5 1.00 0 1.00 1 1 0.01 1 1.01 5 1.00 0 1.01 3 1.01	46, 71 45, 58 46, 26 50, 46 47, 33 0 49, 26 48, 78 45, 46 47, 24 47, 72 46, 77 46, 47 47, 01	40. 38, 30, 42, 40, 41, 38, 38, 39, 40, 39,	1 1, 14 8 1, 18 2 1, 19 0 1, 20 1 1, 19 8 1, 18 2 1, 19 7 1, 10 1,		\$90. 59 90. 04 92. 97 92. 55 92. 28 97. 30 101. 65 98. 90 102. 28 98. 28 102. 80 103. 91

¹ Data are based upon reports from cooperating establishments covering both full- and part-time employees who worked during, or received pay for, any part of the pay period ending nearest the löth of the month. For mining, manufacturing, laundries, and cleaning and dysing plants, data refer to production and related workers only. For the remaining industries, unless otherwise noted, data relate to nonsupervisory employees and working supervisors. Data for the most recent month are subject to revision without notation; revised figures for existe months will be identified by asterisks the first month they are published.

2 Bee footnote 2, table A -2.

3 Bee footnote 2, table A -2.

4 Italicised titles which follow are components of this industry.

4 Figures for class I railroads (excluding switching and terminal companies) are based upon monthly data summarized in the M-300 report by the Interstate Commerce Commission and relate to all employees who received pay during the month, except executives, officials, and staff assistants (ICC Group I).

switchboard operators, service assistants, operating-room instructors, and pay-station attendants. During 1953 such employees made up 46 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

1 Data relate to employees in such occupations in the telephone industry as central office craftsmen; installation and exchange repair craftsmen; line, cable, and conduit craftsmen; and laborers. During 1953 such employees made up 24 percent of the total number of nonsupervisory employees in telephone establishments reporting hours and earnings data.

1 itemonth average.

* i0-month average.

1* Data on average weekly hours and average hourly earnings are not avail-

able.

If Money payments only; additional value of board, room, uniforms, and tips not included.

See Novs on p. 588.

Note.-Information on concepts, methodology, etc., is

given in a technical note on Hours and Earnings in Nonagricultural Industries, which appeared in the April 1954 Monthly Labor Review.

during the month, except executives, obscute, officers, officers,

Table C-2: Gross average weekly earnings of production workers in selected industries, in current and 1947-49 dollars ¹

	Manuf	acturing		nineus- nining	Lau	ndries		Manuf	seturing	Bitun coal r	nining	Laur	ndries
Period	Cur- rent dollars	1947-49 dollars	Cur- rent dollars	1947-49 dollars	Cur- rent dollars	1947-49 dollars	Period	Cur- rent dollars	1947-49 dollars	Cur- rent dollars	1947-49 dollars	Cur- rent dellars	1947-46 dollars
1929: Average 1040: Average 1041: Average 1041: Average 1041: Average 1043: Average 1045: Average 1046: Average 1046: Average 1047: Average 1047: Average 1048: Average 1049: Average 1050: Average 1050: Average 1050: Average	\$23.86 25.20 29.58 36.65 43.14 46.08 44.39 43.82 49.97 54.14 54.92 59.32 64.71 67.97 71.69	\$40. 17 42. 07 47. 08 52. 58 88. 30 61. 28 57. 72 52. 54 52. 52 52. 67 53. 95 67. 71 58. 30 62. 67	\$23. 88 24. 71 30. 86 35. 02 41. 62 51. 27 82. 28 58. 03 66. 59 72. 12 63. 28 70. 35 77. 79 78. 09	\$40. 20 41. 25 49. 06 50. 24 56. 24 68. 18 67. 95 69. 78 70. 16 62. 16 68. 43 70. 08 68. 80 74. 87	\$17. 64 17. 93 18. 69 20. 34 23. 68 25. 95 27. 73 30. 20 32. 71 34. 23 35. 47 37. 81 38. 63 39. 69	\$29. 70 29. 93 29. 71 29. 18 81. 19 34. 51 36. 06 36. 21 34. 25 33. 30 34. 36 34. 50 84. 06 34. 06	1964: February March April May June July August September October November December 1985: January February	871. 28 70. 71 70. 20 71. 13 71. 68 70. 92 71. 86 72. 22 73. 57 74. 12 73. 97 74. 34	\$61, 96 61, 59 61, 85 62, 25 61, 56 61, 79 62, 65 63, 67 64, 20 64, 85 64, 72 65, 04	879. 04 73. 06 71. 67 76. 32 83. 00 75. 39 82. 09 81. 17 87. 54 88. 29 92. 01 92. 01 94. 75	\$48. 73 63. 64 62. 54 66. 37 72. 11 68. 44 71. 38 70. 77 76, 48 77. 04 80. 50 80. 50 82. 90	\$39. 80 39. 60 40. 80 40. 50 40. 50 40. 50 40. 50 40. 50 40. 40 50 40. 40 39. 80	834. 6 34. 4 35. 0 35. 0 36. 11 34. 7; 34. 2 35. 3 35. 3 35. 3 35. 3 35. 3 35. 3 35. 3 35. 3

¹ These series indicate changes in the level of average weekly earnings prior to and after adjustment for changes in purchasing power as determined from the Bureau's Consumer Price Index, the years 1947-49 being the base period.

Table C-3: Average weekly earnings, gross and net spendable, of production workers in manufacturing industries, in current and 1947-49 dollars 1

	Gross	Average	Net s	pendable ear	average nings	weekly		Great	Average	Not s	endable earn	average	weekly
Period		earnings		er with		r with 3	Period	weekly	earnings	Work	er with		r with 3 ndents
	A- mount	Index (1947- 49-100)	Cur- rent dollars	1947-49 dollars	Cur- rent dollars	1947-49 dollars		A- mount	Index (1947- 49-100)	Cur- rent dollars	1947-49 dollars	Cur- rent dollars	1947-49 dollars
1989: Average 1940: Average 1941: Average 1941: Average 1942: Average 1943: Average 1944: Average 1944: Average 1946: Average 1947: Average 1947: Average 1948: Average 1949: Average 1950: Average 1951: Average 1950: Average	36, 68 43, 14 46, 08 44, 39 43, 82 49, 97 84, 14 54, 92 59, 23	45. 1 47. 6 55. 9 69. 2 81. 5 87. 0 83. 8 82. 8 94. 4 103. 7 112. 0 122. 2 129. 4	\$23. 56 24. 69 28. 05 31. 77 36. 01 38. 29 36. 97 37. 72 42. 76 47. 43 48. 00 51. 00 54. 04 55. 66 58. 54	\$39.70 41.22 44.59 48.66 50.92 48.08 48.23 44.77 46.14 47.24 49.70 48.68 49.04 51.17	\$23. 62 24. 95 29. 28 36. 28 41. 39 44. 06 42. 74 43. 20 48. 24 53. 17 53. 83 57. 21 fff. 28 55. 58	\$39.76 41.65 46.65 52.65 55.93 56.59 51.80 80.51 81.72 82.86 85.65 85.21 86.05 88.20	1984: February	70. 20 71. 13 71. 68 70. 92 71. 06 71. 86 72. 22 73. 67 74. 12	134.6 133.8 132.6 134.3 135.4 138.7 136.7 136.4 138.7 136.4 139.7 140.0	\$50.00 85, 63 56, 23 58, 97 59, 41 56, 80 55, 91 59, 56 59, 58 60, 92 61, 36 61, 15 61, 44	851, 38 51, 07 60, 80 51, 28 51, 62 51, 62 51, 23 51, 92 52, 26 53, 16 53, 68 63, 50 53, 75	\$66.30 45.83 45.41 66.18 66.63 66.63 66.78 67.07 68.18 68.63 68.41 68.70	\$57. 68 87. 34 57. 08 57. 88 57. 89 57. 50 58. 29 58. 25 59. 49 60, 04 59. 85 60. 10

¹ Net spendable average weekly earnings are obtained by deducting from gross average weekly earnings, social security and income taxes for which the specified type of worker is liable. The amount of income tax liability depends, of course, on the number of dependents supported by the worker as well as on the level of his gross income. Net spendable earnings have, therefore, been computed for 2 types of income-receivers: (1) A worker with no dependents; (2) a worker with 2 dependents. See footnote 1, table C-2.

The computation of net spendable earnings for both the worker with no dependents and the worker with 3 dependents are based upon the gross average weekly earnings for all production workers in manufacturing industries without direct regard to marital status and family composition. The primary value of the spendable series is that of measuring relative changes in disposable earnings for 2 types of income-receivers.

§ Praiminary,

See NOTE on p. 588.

Preliminary. See NOTE on p. 588.

Table C-4: Average hourly earnings, gross and excluding overtime, of production workers in manufacturing industries 1

1941: Average	М	anulactur	ing	Durab	le goods		durable oods			М	nufseturi	ng	Durab	le goods		lurable iods
		Exclu	ding		Ex-		Excited-		Period		Excit	iding time		Ex-		Ex-
	Grees	Amount	Index (1947- 49-100)	Gross	elading over- time	Gross	ing over- time			Gress amount	Amount	Index (1947- 49-100)	Gross	eluding over- time	Gross	over- time
	90. 729 .858 .961 1. 019 1. 023 1. 096 1. 237 1. 350 1. 401 1. 465 1. 89 1. 67 1. 77	\$0. 702 .808 .804 .947 .963 1. 051 1. 198 1. 310 1. 307 1. 418 1. 83 1. 61 1. 71	54. 5 69. 4 73. 5 74. 8 81. 6 93. 0 101. 7 106. 1 109. 9 118. 8 125. 0 132. 8	90, 808 . 947 1, 059 1, 117 1, 111 1, 156 1, 292 1, 410 1, 469 1, 537 1, 67 1, 77 1, 87	\$0.770 .881 .976 1.029 1.042 1.123 1.250 1.396 1.434 1.480 1.60 1.70	\$0.640 .723 .803 .861 .904 1.015 1.171 1.278 1.325 1.378 1.48 1.64	90. 625 .608 .763 .814 .888 .961 1.133 1.241 1.292 1.337 1.43 1.49 1.56	1954:	Mareh April May June July August September October November December	\$1.80 1.79 1.80 1.81 1.81 1.80 1.79 1.81 1.83 1.83 1.83	\$1. 75 1. 76 1. 76 1. 76 1. 76 1. 78 1. 78 1. 76 1. 77 1. 77 1. 77	135. 9 135. 9 136. 6 136. 6 136. 6 136. 6 136. 6 137. 4 137. 4 138. 2 138. 2	\$1.90 1.90 1.90 1.91 1.91 1.91 1.93 1.93 1.94 1.95 1.96	1. 86 1. 86 1. 86 1. 85 1. 87 1. 87	\$1. 65 1. 65 1. 65 1. 66 1. 66 1. 66 1. 65 1. 67 1. 67 1. 68 1. 68	\$1.60 1.60 1.60 1.60 1.60 1.61 1.60 1.61 1.60 1.60

¹ Overtime is defined as work in excess of 40 hours per week and paid for at time and one-ball. The computation of average hourly earnings excluding overtime makes no allowance for special raise of pay for work done on holidays.

Table C-5: Indexes of aggregate weekly man-hours in industrial and construction activity 1

				100		1001									
Industry	25	155						1954							nuai rage
and the same of	Feb.	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	April	Mar.	Feb.	1963	1952
Total	101.5	100.6	103.7	104.3	103.8	103.1	102.9	100. 2	102.1	100.4	99.9	101.8	102.4	113. 5	109.
Mining division	73.7	74.1	74. 5	73.7	73.0	71.8	74.8	72.5	75.4	72.3	71. 5	73. 9	78.0	86.6	90.
Contract construction division	97.4	101.1	114.5	124.1	129, 3	129. 4	135. 4	132.7	129.4	122. 5	115.9	109. 6	106.0	124.2	127.
Manufacturing division	103.9	102.3	104.1	100. 5	102. 2	101. 4	100.1	97.4	100.0	99.1	99.5	102. 5	163. 5	113.7	106.
Durable goods	112.1 457.6	110.0 465.4	111. 2 480. 5	110. 1 463. 7	107.3 490.5	104. 7 494. 7	108. 5 499. 9	102.2 506.1	107. 0 822. 1	107. 2 542. 0	108, 1 587, 3	110.6 654.3	112.5 712.1	125. 5 826. 7	116.
furniture) Furniture and fixtures Stone, clay, and glass products	89. 2 100. 7 100. 1	87. 2 97. 1 98. 8	91. 8 160. 7 101. 5	95.9 101.0 102.2	97. 7 101. 7 102. 2	92.3 99.7 100.7	83. 2 96. 6 90. 9	90. 6 88. 9 96. 7	98.8 90.0 97.8	88.5 88.8 97.6	85.3 91.6 97.3	84, 1 96, 2 98, 2	99.7 97.8	94. 0 108. 2 106. 6	96. 106. 104.
Primary metal industries. Fabricated metal products (except ordnance, machinery, and transportation equipment).	103.5	100. 6	98.7	110.8	92.7	105.0	91.6	91. 5	94.0	107.8	105.9	109.4	97. 8	114.0	104.
Machinery (except electrical) Electrical machinery. Transportation equipment.	110. 5 99. 7 129. 5 148. 4	97. 7 128. 6 145. 7	97. 5 130. 6 144. 8	95. 1 131. 5 138. 2	94. 8 128. 7 125. 6	95.3 125.5 118.3	94.9 121.5 124.2	95. 9 117. 2 127. 0	100. 6 119. 8 131. 9	102.0 122.0 136.0	103. 7 123. 8 138. 6	106.6 127.9 141.0	108.6 130.6 144.0	118.9 148.0 158.7	118. 131. 128.
Instruments and related products	110.6	110.0	111.4	110.7	110.0	109.8	106.6	106. 8	110. 2	112.0	114.3	118.9	120.9	129.1	122.
tries	99.3	95.4	99.9	103.8	104.6	101.6	97.8	91.6	96.4	95.6	95.6	101.0	102.1	109.8	100.
Nondurable goods Food and kindred products Tobacco manufactures Textile-mill products Apparel and other finished textile prod-	94. 1 79. 4 81. 9 83. 8	93. 1 81. 7 85. 4 82. 3	95. 6 87. 3 95. 4 84. 1	95. 6 91. 0 94. 0 83. 2	96.1 95.8 111.0 81.6	97.6 103.9 107.9 80.2	96. 1 101. 0 97. 4 79. 6	91. 7 94. 8 78. 1 75. 8	91. 6 89. 4 78. 4 78. 0	89. 4 84. 2 75. 5 76. 0	90. 2 81. 3 73. 5 76. 5	92.9 81.5 75.0 79.2	92.8 81.8 80.1 79.5	99.7 93.8 90.1 90.0	94. 94. 92. 90.
Paper and allied products Printing, publishing, and allied indus-	106.8 107.8	101.6 107.5	102. 8 109. 6	101.0 110.7	99. 6 110. 4	100.6 110.2	101. 0 100. 0	91. 8 107. 2	91. 9 108. 5	91. 5 106. 9	98. 8 105. 7	106.1 107.8	104. 8 107. 5	105, 8 111, 4	104.1 105.1
tries Chemicale and allied products Products of petrolsum and coal Rubber products Leather and leather products	105. 6 163. 1 90. 1 109. 8 98. 9	104.5 102.8 91.2 109.6 93.8	108. I 103. 6 92. 2 109. 8 93. 1	106. 5 103. 3 93. 8 105. 6 90. 3	106. 5 103. 1 94. 0 103. 6 66. 6	106. 7 102. 3 96. 7 96. 2 96. 1	104. 5 99. 9 97. 5 87. 0 92. 9	103. 9 99. 4 98. 6 85. 8 90. 3	104. 9 101. 0 99. 3 100. 1 87. 4	104.0 101.8 97.4 96.3 82.2	104. 0 103. 8 94. 0 95. 0 85. 3	106, 4 104, 9 94, 0 96, 4 98, 8	103.7 104.4 94.9 99.1 94.9	105. 5 107. 8 100. 9 111. 7 95. 4	100. 104. 98. 108. 98.

¹ Aggregate man-hours are for the weekly pay period ending nearest the 18th of the month and do not represent totals for the month. For mining and manufacturing industries, data refer to production and related workers. For contract construction, the data relate to construction workers.

^{† 11-}month average; August 1945 excluded because of V-J holiday period. † Preliminary. See NOTE on p. 588.

Preliminary.
Includes only the divisions shown.

D: Consumer and Wholesale Prices

Table D-1: Consumer Price Index '-United States average, all items and commodity groups

[1947-49-100] Housing * Other goods and ervices Reading Trans porta-tion All Total Medical Persons and recrea-tion Total Year and month House-hold op-eration Gas and Solid Hause SUCIETY Total Rent fuels and furnish 1947: Average. 1948: Average. 1949: Average. 1950: Average. 1951: Average. 1953: Average. 1954: Average. 95. 8 102. 8 101. 8 102. 8 111. 0 113. 5 114. 4 114. 8 96. 9 104. 1 100. 0 101. 2 112. 6 114. 6 112. 8 112. 6 97. 1 163. 5 99. 4 98. 1 106. 9 105. 8 104. 8 104. 3 95. 0 101. 7 108. 3 106. 1 112. 4 114. 6 117. 7 97. 6 100. 0 102. 5 102. 7 103. 1 104. 5 106. 6 107. 9 97, 2 163, 2 99, 6 100, 3 111, 2 108, 5 107, 9 106, 1 97. 2 162. 6 100. 1 101. 2 106. 0 111. 8 115. 3 117. 4 90. 6 100. 9 108. 5 111, 8 118. 4 126. 2 129. 7 128. 0 94. 9 100. 9 104. 1 106. 0 111. 1 117. 2 121. 3 125. 2 97. 6 101. 3 101. 1 101. 1 110. 8 111. 8 112. 8 113. 4 98. 8 100. 4 104. 1 103. 4 103. 8 107. 0 108. 0 107. 0 96, 1 160, 8 163, 4 165, 2 169, 7 115, 4 118, 2 120, 1 88. 8 104. 4 106. 8 110. 5 116. 4 118. 7 123. 9 123. 5 94. 4 100. 7 106. 0 106. 8 113. 1 117. 9 194. 1 128. 5 1982: January 113. 1 115. 6 112. 6 112. 7 113. 9 114. 3 114. 6 116. 3 116. 6 115. 4 115. 0 115. 0 107. 0 106. 8 106. 4 106. 0 105. 8 105. 6 105. 3 106. 1 108. 8 105. 6 105. 2 113. 9 114. 0 114. 0 114. 0 114. 0 114. 0 114. 4 114. 6 114. 8 115. 2 115. 7 116. 4 116. 6 116. 4 116. 7 116. 9 117. 4 117. 6 117. 9 118. 2 118. 3 118. 8 119. 5 103. 5 103. 8 103. 8 108. 9 104. 1 104. 2 105. 0 105. 0 105. 0 105. 6 117. 7 117. 6 117. 7 117. 3 118. 6 118. 6 119. 6 121. 1 121. 6 128. 2 110. 2 110. 0 100. 4 108. 7 108. 3 107. 7 107. 6 107. 6 108. 1 107. 9 108. 0 108. 2 110.9 110.8 111.0 111.0 111.2 111.2 111.8 111.0 112.1 112.8 113.3 113.4 122. 8 123. 7 124. 4 124. 8 125. 1 126. 8 127. 0 127. 7 128. 4 128. 9 128. 9 114, 7 114, 8 115, 7 115, 9 116, 1 117, 8 118, 0 118, 1 118, 8 118, 9 118, 0 119, 3 111. 0 111. 1 111. 0 111. 3 111. 6 111. 7 111. 9 112. 1 112. 1 112. 3 112. 4 112. 8 107. 2 106. 6 106. 3 106. 2 106. 2 107. 0 107. 0 107. 6 107. 4 108. 0 118. 2 114. 4 114. 8 115. 2 115. 8 115. 7 116. 0 118. 9 118. 8 118. 8 118. 8 February..... March 112.4 112.4 112.9 113.0 113.4 114.1 114.3 114.1 114.2 114.3 April May..... June...... July. August
September
October November..... 119. 4 119. 3 119. 8 120. 2 120. 7 121. 1 121. 1 1953; January. 113. 9 113. 4 118. 6 118. 7 114. 0 114. 5 114. 7 115. 0 115. 2 115. 4 115. 0 114. 9 113. 1 104. 6 104. 6 104. 7 104. 6 104. 7 104. 6 104. 4 104. 3 105. 3 105. 5 105. 5 118. 4 116. 6 116. 8 117. 0 117. 1 117. 4 117. 8 118. 0 118. 4 118. 7 118. 9 105. 9 106. 1 106. 5 106. 5 106. 4 106. 4 106. 9 107. 0 107. 3 107. 2 123. 3 123. 3 124. 4 123. 6 121. 8 121. 8 123. 7 123. 9 124. 6 125. 7 125. 9 125. 3 107. 7 108. 0 108. 0 107. 8 107. 6 106. 0 106. 1 108. 1 108. 1 108. 3 113, 4 113, 5 114, 0 114, 3 114, 7 115, 4 115, 7 115, 8 116, 0 116, 6 116, 9 129. 3 129. 1 120. 3 129. 4 129. 4 129. 4 129. 7 130. 6 130. 7 130. 7 130. 1 128. 9 112.4 112.5 112.5 112.6 112.6 112.6 112.7 112.9 113.2 113.4 113.6 107. 8 107. 5 107. 7 107. 9 108. 0 107. 8 107. 6 107. 8 108. 6 108. 9 115, 9 117, 8 117, 8 117, 9 118, 0 118, 2 118, 3 118, 4 118, 5 119, 7 120, 2 126, 3 February..... March 121. 8 121. 7 111. 5 111. 7 111. 5 112. 1 113. 7 113. 8 114. 1 113. 8 114. 1 113. 6 112. 0 112. 3 April May June July 122, 1 123, 0 123, 8 123, 8 125, 1 126, 0 126, 8 127, 8 127, 6 121. 8 121. 8 122. 6 122. 8 123. 3 123. 6 August
September
October
November
December 118. 8 118. 9 119. 0 118. 5 118. 9 119. 0 107. 2 107. 2 107. 2 106. 1 105. 9 105. 8 115. 2 118. 0 114. 8 114. 6 115. 0 115. 1 115. 2 115. 0 114. 7 114. 8 114. 6 114. 3 113. 1 112. 6 112. 1 112. 4 113. 3 113. 8 114. 6 113. 9 112. 4 111. 8 111. 1 110. 4 104. 9 104. 7 104. 3 104. 1 104. 2 104. 0 103. 7 104. 3 104. 6 104. 6 127. 8 127. 9 128. 0 128. 3 128. 3 128. 5 128. 6 128. 6 129. 0 129. 2 129. 4 107, 1 107, 5 107, 6 107, 6 107, 6 107, 8 107, 8 107, 8 107, 8 107, 9 108, 5 108, 7 109, 1 125. 7 126. 2 125. 8 123. 9 120. 9 121. 1 121. 9 122. 4 123. 8 124. 2 125. 8 117, 2 117, 3 117, 5 116, 9 117, 2 117, 2 117, 2 117, 3 117, 4 117, 6 117, 8 117, 7 130. 5 129. 4 129. 0 129. 1 129. 1 125. 9 126. 7 126. 6 126. 4 125. 0 127. 6 127. 6 123. 7 124. 1 124. 4 124. 9 125. 1 125. 2 125. 5 126. 7 126. 1 126. 3 113.7 113.9 114.1 112.9 113.0 112.7 113.3 113.4 113.8 113.8 113.6 108. 7 108. 0 108. 2 108. 8 106. 4 106. 4 106. 6 106. 5 106. 9 106. 8 106. 6 120. 3 120. 2 120. 1 120. 2 120. 1 120. 3 120. 2 120. 1 120. 1 120. 0 119. 0 January. February...... March April May August September October November 108. 4 106. 0 105. 6 105. 4 108. 4 119. 5 119. 5 119. 7 114.3 114.3 114.3 110.6 109.3 119.6 109. 4 109. 9 110. 3 126. 1 126. 2 126. 2 104. 6 104. 8 104. 6 117.7 127.6 127.4 127.3 126. 5 118.7 106.9 119.9 1955: January 129.5 February..... March 168.4 106, 4 106, 6

¹A major revision was incorporated in the Consumer Price Index beginning January 1953. The revised index, based on 46 cities, has been linked to the previously published "interim adjusted" indexes for 34 cities and rebused on 1947-49-100 to form a continuous series. For the convenience of users, the "All-itense" indexes are also shown on the 1935-39-100 base in table D-4. The revised Consumer Price Index measures the average change in prices of goods and services purchased by urban wase-entre and cieriosi worker families. Data for 46 large, medium, and small cities are combined for the United States average.

of goods and services purchased by urban wage-earner and clerical-worker families. Dats for 46 large, medium, and small eithes are combined for the United States average.

For a history and description of the index, see: The Consumer Price Index—A Layman's Guide, Bulletin 1140; The Consumer Price Index, in the February 1953 Monthly Labor Review; The Interfin Adjustment of Consumers' Price Index, in the April 1951 Monthly Labor Review; Interfin Adjustment of Consumers' Price Index, Bulletin 1959, and the following reports: Consumers' Price Index, Report of a Special Subcommittee of the House Consumers' Price Index, Report of a Special Subcommittee of the House Consumers'

mittee on Education and Labor (1951); and Report of the President's Committee on the Cost of Living (1945).

Mimeographed tables are available upon request showing indexes for the United States and 25 individual cities regularly surveyed by the Bureau for "All items" and 8 major components from 1947 to date. Indexes are also available from 1918 for "All items," food, appars, and rent, for all large cities combined, and from varying dates for individual cities.

* Includes "Food away from home" (restaurant meshs and other food bought and eaten away from home); prior to January 1953, priors for this category were estimated to move like prices for "Food at home" but, since that date, have been measured by prices of restaurant meshs.

* Includes "Other shelter."

* Includes tobacco, clocholic beverages, and "miscellaneous services" (such as legal services, banking (ees., and burial services).

TABLE D-2: Consumer Price Index 1-United States average, food and its subgroups [1947-49-100]

				Food at	home							Food a	t home		
Year and month	Total food 2	Total food at home	Cereals and bakery prod- ucts	Menta, poul- try, and fish	Dairy prod- ucts	Fruita and vege- tables	Other foods 1	Year and month	Total food s	Total food et home	Cereals and bakery prod- acts	Ments, poul- try, and fish	Dairy prod- nets	Fruits and vere- tables	Other foods
1947: Avg	95. 9 104. 1 100. 0 101. 2 112. 6 113. 1 111. 5 113. 1 111. 5 113. 1 113. 8 114. 1 113. 6	95. 9 104. 1 100. 0 101. 2 112. 6 114. 6 112. 9 111. 9 111. 1 111. 3 111. 1 111. 7 113. 8 114. 1 113. 5	94. 0 168. 4 102. 7 104. 5 114. 0 116. 8 119. 1 121. 9 117. 7 117. 6 117. 6 118. 0 118. 4 118. 0 119. 1 119. 5 120. 3	98. 5 106. 1 100. 5 104. 9 117. 2 109. 9 108. 0 110. 7 107. 7 107. 7 107. 8 109. 2 111. 3 112. 0 114. 1 113. 5	96. 7 96. 9 96. 9 107. 0 111. 7 109. 6 106. 1 110. 7 110. 3 107. 8 107. 8 107. 8 109. 1 109. 6	97. 6 100. 5 97. 6 105. 7 117. 2 113. 5 111. 9 116. 7 116. 9 117. 2 117. 7 118. 2 121. 7 106. 6 107. 7	100. 1 102. 5 97. 5 101. 2 114. 6 109. 3 112. 2 114. 8 109. 7 107. 3 106. 1 110. 3 110. 3 111. 9 112. 3 114. 4 116. 7	1953: Nov Dec	112.0 112.3 113.1 112.6 112.1 113.8 113.8 114.6 114.6 113.9 112.4 111.1 110.4 110.5	111. 4 111. 7 112. 6 112. 0 111. 4 111. 8 113. 3 114. 2 113. 3 111. 6 110. 9 110. 1 109. 2 109. 6 109. 7	120, 6 130, 9 121, 2 121, 3 121, 2 121, 1 121, 3 121, 6 122, 3 122, 6 122, 7 123, 1 123, 3 124, 6 125, 8 125, 8 126, 9	107. 0 107. 8 110. 2 109. 7 109. 8 111. 0 111. 1 109. 7 107. 6 103. 9 103. 9 102. 2 102. 4 102. 5	110, 5 110, 1 109, 7 109, 0 108, 0 104, 6 103, 5 102, 9 105, 1 105, 8 106, 7 106, 8 106, 8 106, 1 106, 1	107. 4 100. 2 110. 8 108. 0 107. 8 110. 0 114. 6 117. 1 120. 1 114. 7 110. 5 111. 1 109. 6 108. 4 110. 7 112. 0	114. 113. 113. 114. 112. 113. 114. 115. 117. 119. 116. 115. 113. 112. 111.

[!] See footnote 1 to table D-1. Indexes for 18 food subgroups (1935-39-100) from 1923 to December 1932 were published in the March 1933 Monthly Labor Review and in previous issues.

TABLE D-3: Consumer Price Index 1-United States average, apparel and its subgroups [1947-49-100]

Year and month	Total apparel	Men's and boys'	Women's and girls'	Foot- wear	Other s apparel	Year and month	Total apparel	Men's and boys'	Women's and girls'	Poot- wear	Others apparel
1947: Avg	98. 1 106. 9 105. 8 104. 8 104. 3 104. 6 104. 7 104. 6 104. 7 104. 6 104. 7	97. 3 102. 7 100. 0 99. 5 107. 7 108. 2 107. 1 105. 8 107. 3 107. 3 107. 2 107. 2 107. 3	98. 0 103. 8 98. 1 94. 8 102. 2 100. 2 100. 7 99. 7 99. 7 99. 7 99. 7 99. 6 99. 6 99. 4 99. 2 98. 9 98. 7 100. 5 100. 5	94. 5 103. 2 102. 4 104. 0 117. 7 115. 3 116. 3 116. 4 114. 5 114. 5 115. 0 115. 0 115. 0 115. 0	(*) 108. 6 93. 2 92. 0 101. 6 92. 1 92. 1 92. 7 92. 9 92. 8 92. 4 92. 1 92. 3 92. 3 92. 3	1953: Nov	108, 5 106, 3 104, 9 104, 3 104, 1 104, 2 104, 2 104, 0 103, 7 104, 6 104, 6 104, 6 104, 3 103, 3 103, 3	107. 8 107. 6 107. 4 107. 2 107. 2 107. 1 107. 3 107. 0 106. 6 106. 4 106. 5 105. 5	100. 7 100. 5 99. 8 99. 8 99. 5 90. 0 98. 4 98. 5 98. 5 98. 5 99. 6 99. 6 99. 6 97. 7 97. 6 97. 7	116. 2 116. 1 116. 2 116. 1 116. 1 116. 1 116. 3 116. 5 116. 5 116. 7	91. 90. 90. 90. 90. 90. 91. 90. 90. 91. 91. 91. 91. 91.

 $^{^3}$ See footnote 2 to table D-1. 3 Includes eggs, fats and olfs, sugar and sweets, beverages (nonalcoholie), and other miscellaneous foods.

See footnote 1 to table D-1, Includes diapers, yard goods, and an unpriced group of items represented

in the index by the weighted average of prices for all priced items in the total

apparel group.
Not available.

TABLE D-4: Consumer Price Index -United States average, all items and food

	1947-4	9-100	1935-39-100		1917-4	100	1935-39-100		1947-4	i0-100	1935-39-10
Year	All items	Total food	All Items	Year and menth	All	Total food	All items	Year and month	All	Total food 1	All items
1913: Average	42.3	39.6	70.7	1944: Average	75.2	67.4	125.7	1952: September	114.1	115.4	190.1
914: Average	42.9	40.5	71.8	1945: Average	76.9	68.9	128.6	October	114.2	115.0	190.1
1915: A verage		40.0	72.5	1946: Average	83.4	79.0	139.5	November	114.3	115.0	191.
916: Average	46.6	45.0	77.9	1947: Average	95. 8	95.9	159.6	December	114.1	113.8	190.
917: Average	54.8	87.9	91.6	1948: A vernge	102.8	104.1	171.9	1953: January	113.0	113.1	190.
918: Average	64.3	60.5	107.5	1949: Average	101.8	100.0	170.2	February	113.4	111. 5	189.6
919: Average	74.0	74.2	123.8	1950: Average	102.8	101. 2	171.9	March	113.6	111.7	180.1
920: Average	85.7	83.6	143.3	1951: Average	111.0	112.6	185.6	April	113.7	111.8	190.1
921: A verage	76.4	63.5	127.7	1952: Average	113.5	114.6	189.8	May	114.0	112.1	190.6
922: Average	71.6	59.4	119.7	1953: Average	114.4	112.8	191.3	June	114.5	113.7	191.
923: Average	72.9	61. 4	121.9	1954: Average	114.8	112.6	191.9	July	114.7	113.8	191.1
924: Average	78.1	60.8	122.2	1951: January	106.6	100.9	181.5	August	115.0	114.1	199, 1
925: Average	75.0	65.8	125.4	February	100.9	111.9	183.8	fleptember	115.2	113.8	192.6
926: Average	75.6	68.0	126.4	March	110.3	112.0	184. 5	October	118.4	113.6	192.1
927: Average	74.2	65. 5	124.0	A pril	110.4	111.7	184.6	November	115.0	112.0	192.
928; Average	73.3	64.8	122.6	May	110.9	112.6	185. 4	December	114.9	112.3	192.
929: Average	73.3	65. 6	123.5	June	110.8	112.3	185. 2	1954: January	115.2	113. 1	192.
930: A verage	71.4	62.4	119.4	July	110.9	112.7	185. 5	February	115.0	112.6	192.
931: A verage	65.0	81.4	108.7	August	110.9	112.4	185.8	March	114.8	112.1	191.1
932: A vernge	58.4	42.8	97.6	Heptember	111.6	112. 8	186.6	April	114.6	112.4	191.
933: Average	55, 3	41.6	92.4	October	112.1	113.5	187. 4	May	118.0	113. 3	192.
934: Average	87.2	46.4	95.7	November	112.8	114.6	188.6	June	115. 1	113.8	192.
935: A verage	58.7	49.7	98.1	December	113.1	115.0	189.1	July	118.2	114.6	192.
936: A verage	59.3	50.1	99.1	1952: January	113.1	115.0	189.1	August	118.0	113.9	192.1
937: Average	61.4	52.1	102.7	February	112.4	112. 6	187.9	September	114.7	112.4	191.1
935: Average	60.3	48.4	100.8	March	112.4	112.7	188.0	October	114. 5	111.8	191. 4
939: Average	89. 4	47.1	99.4	April	112.9	113.9	188.7	November	114.6	111.1	191.6
940: Average	59.9	47.8	100.2	May	113.0	114.3	189.0	December	114.3	110.4	191. 1
941: Average	62.9	82. 2	108.2	June	113.4	114.6	189.6	1988: January	114.3	110.6	191.
942: Average	69.7	61.3	116, 6	July	114.1	116.3	190.8	February	114.3	110, 8	191. 1
943: A verage	74.0	68.3	123.7	August	114.8	116.6	191.1	March	114.3	110.8	191. 1

See footnote 1 to table D-1.

TABLE D-5: Consumer Price Index -All items indexes for selected dates, by city

							1947-4	0=100							1935-36 = 100
City	Mar. 1955	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1964	Aug. 1984	July 1954	June 1954	May 1954	Apr. 1954	Mar. 1954	June 1950	Revised series Mar. 1958
United States average 1	114.3	114.3	114.3	114.3	114.6	114. 5	114.7	118.0	115. 2	115.1	118.0	114.6	114.8	101.8	191, 1
Atianta, Ga Baltimore, Md Boston, Mass Chicago, Ill Cincinnati, Ohio	115.3 114.9 (7) 117.0 113.4	(1) (8) (2) 117, 1 (3)	(8) (8) 113. 0 117. 0 (8)	115.7 114.8 (*) 117.0 113.3	(3) (4) (8) 117.6	(*) (*) 113. 5 117. 1 (*)	116. 3 115. 2 (4) 117. 4 114. 3	(8) (8) (9) 117. 7 (8)	(*) (*) 113.8 118.0 (*)	117. 6 115. 8 (*) 117. 3 114. 2	(*) (*) 117. 3	(*) (*) 112. 9 116. 8 (*)	117. 0 114. 8 (*) 116. 7 114. 3	(*) 101. 6 102. 8 102. 8 101. 2	195, 5 197, 5 (F) 199, 3 191, 0
Cleveland, Ohio	116.3	114. 9 116. 3 115. 7 (°) 114. 7	(9) 116.0 (3) 115.3 115.4	(*) 116. 2 (*) (*) 115. 3	115.3 116.9 116.7 (*) 115.0	(*) 116.0 (*) 115.7 114.8	(8) 116. 2 (8) (9) 115. 4	115. 3 116. 8 116. 5 (*) 115. 1	(*) 117. 5 (*) 115. 6 114. 9	117. 1 (*) (*) (*) 116. 7	115. 8 116. 9 116. 7 (*) 115. 9	(*) 116. 7 (*) 115. 8 115. 7	(*) 116. 5 (*) (*) 116. 2	(*) 102. 8 103. 8 (*) 101. 3	(*) 196. 3 (*) (*) 192. 3
Minneapolis, Minn New York, N. Y Philadelphia, Pa Pittsburgh, Pa Portiand, Oreg	(2) 112, 4 115, 8 (3) (2)	(3) 112.5 115.7 (3) (3)	116. 5 112. 3 115. 4 113. 8 114. 6	(8) 112.2 115.6 (8)	(1) 112.7 115.9 (1) (1)	116. 9 112. 6 116. 1 114. 3 115. 2	(*) 112.7 116.2 (*)	(*) 113.0 116.2 (*)	117. 3 113. 3 116. 3 118. 4 118. 5	(*) 112.9 118.9 (*)	(*) 112. 9 115. 3 (*)	116. 3 112. 5 115. 1 114. 5 114. 8	(*) 112.4 114.9 (*)	102, 1 100, 9 101, 6 101, 1 (*)	(4) 186, 0 192, 7 (0) (1)
St. Louis, Mo	115, 6 115, 6 (2) (3) (1)	(*) (*) 111. 7 116. 3 113. 2	(8) (8) (8) (8)	115. 4 115. 7 (*) (*) (*)	(8) (8) 112.3 115.7 113.8	(1)	115. 7 116. 2 (*) (*) (*)	(8) (9) 112, 4 116, 2 114, 1	(*) (*) (*) (*)	117. 4 116. 6 (0) (6)	(*) (6) 112.3 116.3 113.7	33333	116. 9 116. 5 (*) (*)	101. 1 100. 9	192, 9 197, 6 (*) (*)

¹ See footnote 1 to table D-1. Indexes are based on time-to-time changes in the cost of goods and services purchased by urban wage-earner and clorical-worker families. They do not indicate whether it costs more to live in one city than in another.
³ Average of 46 cities beginning January 1953. See footnote 1 to table D-1.

³ See footnote 2 to table D-1.

Prior to January 1953, indexes were computed monthly for 9 of these cities and once every 3 months for the remaining 11 cities on a rotating cycle. Beginning in January 1963, indexes are computed monthly for 5 cities and once every 3 months for the 15 remaining cities on a rotating cycle.

TABLE D-6: Consumer Price Index 1—All items and commodity groups, except food,2 by city
[1947-49-100]

					[1947-49-]	100]						
	All	items	Perso	nal care	Med	ical care	Transp	portation	Read	ing and eation	Other	goods and rvices
City and cycle of pricing	March 1988	March 1954	March 1985	March 1984	March 1955	March 1954	March 1988	March 1954	March 1955	March 1954	March 1965	March 1954
United States average	114.8	114.8	113.5	114. 1	127.6	124.4	127. 3	129.0	106.6	108.	119.8	120.
Monthly: Chicago, Ill. Detroit, Mich Los Angeles, Calif. New York, N. Y. Philadelphia, Pa. Mar., June, Sept., and Dec.:	117. 0 116. 3 115. 1 112. 4 116. 8	116.7 116.5 116.2 112.4 114.9	115. 3 119. 7 117. 4 108. 3 117. 7	114.7 120.0 117.9 108.6 118.0	132.3 122.8 125.0 185.4	122.3 121.3 123.2 123.7	133. 0 121. 3 127. 6 130. 1 137. 3	132. 7 121. 2 127. 7 134. 6 137. 4	113. 1 107. 9 97. 2 104. 6 112. 4	107. 0 111. 1 102. 0 105. 8 110. 8	124. 7 114. 5 121. 0 123. 5	121.
Philadelphia, Pa. Mar., June, Sept., and Dec.: Atlanta, Ga. Baltimore, Md. Cincinnati, Ohio. St. Louis, Mo. Sun Francisco, Calif.	114. 9 113. 4 115. 6 115. 6	114. 8 114. 2 116. 9 116. 8	107.6 109.0 113.5 110.9	108. 6 110. 2 114. 6 113. 0	134. 4 127. 4 140. 3	133, 3 124, 6 134, 6	136. 8 123. 8 134. 8 140. 8	138. 2 128. 2 136. 2 143. 4	118. 7 101. 0 92. 7 108. 7	113. 7 99. 8 99. 4 105. 7	122.6 116.1	
	February 1965	February 1954	February 1955	Februar 1984	Februar 1955	February 1954	February 1955	February 1954	February 1955	Februar 1954	February 1955	February 1954
Feb., May, Aug., and Nov.: Cleveland, Ohio	114.9 118.7 111.7 116.3 113.2	115. 2 116. 9 113. 2 116. 2 114. 1	114, 5 119, 6 111, 5 116, 0 111, 3	115. 0 120. 3 113. 0 111. 3 112. 4	131. 0 120. 0 119. 6 130. 6 118. 2	119. 2 119. 6 129. 8	119. 5 123. 7 128. 2 128. 5 129. 0	123. 1 125. 5 128. 4 182. 9 128. 1	116. 4 109. 7 118. 5 107. 4 104. 3	117. 3 112. 0 117. 7 111. 0 110. 5	119. 1 118. 8 116. 1 125. 9 129. 8	119. 8 119. 6 116. 3 127. 2 127. 2
	January 1955	January 1954	January 1965	January 1954	January 1955	January 1954	January 1955	January 1954	January 1955	January 1984	January 1958	January 1954
Jan., Apr., July, and Oct.: Boston, Mass Kansus City, Mo. Minneapolis, Minn Pittsburgh, Pa. Portland, Oreg	113. 0 115. 3 116. 5 113. 8 114. 6	112.7 115.0 116.6 114.4 115.4	112.3 116.5 115.9 116.9 110.6	112.6 116.3 116.7 113.3 111.7	124. 5 136. 0 143. 3 126. 5 126. 2	124. 5 120. 1 138. 8 121. 2 121. 0	133. 8 125. 8 121. 6 138. 0 123. 7	135. 5 125. 9 121. 9 130. 4 125. 8	107. 4 115. 2 115. 7 99. 1 118. 8	107. 3 116. 8 115. 7 99. 7 117. 1	118. 4 117. 1 125. 5 120. 4 118. 6	118. 0 117. 6 125. 3 120. 5 119. 4
						App	oarel					
		Total	2	den's and	boys'	Women's	and girls'		Footwear		Other ap	parel *
	March 1958	Mar 195		arch 955	March 1954	March 1988	March 1984	Marc 1985		arch 164	March 1955	March 1954
United States average	108	2 1	04.3	105. 6	107. 2	97.4	99.	0 11	6. 7	116.1	90.4	90.0
Monthly: Chicago, Ill. Detroit, Mich. Los Angeles, Calif. New York, N. Y. Philadelphia, Pa.	104 102 103 102 104	5 16 4 16 1 16	98. 2 92. 8 94. 8 94. 5 95. 8	110.0 107.4 108.0 106.1 108.8	113. 8 109. 3 109. 5 106. 6 105. 2	90. 0 95. 6 96. 2 94. 9 108. 0	101. 95. 98. 99. 104.	0 11 4 11 6 11	2.7 8.0 5.8	117. 5 112. 5 115. 1 115. 4 116. 8	92. 9 87. 4 82. 7 93. 3 92. 2	98. 6 86. 2 81. 8 98. 6 92. 2
Mar. Juns, Bept., and Dec.: Atlanta, Ga Baltimore, Md. Cincinnati, Ohio. St. Louis, Mo. San Francisco, Calif.	108. 102. 103. 104. 100.	7 16 4 16 1 16	11. 2 12. 4 18. 1 14. 5	110. 9 101. 2 103. 8 107. 6 104. 9	114. 6 101. 3 106. 1 109. 7 105. 6	102, 2 99, 8 98, 8 96, 7 98, 7	105. 98. 96. 96.	9 116 8 12 8 116	6. 7 3. 0 9. 0	122.6 117.5 122.6 117.8 113.5	91. 0 94. 4 86. 2 96. 0 87. 8	91. 3 93. 1 85. 1 95. 6 87. 8
	February 1955	Febru 1954	ary Feb	ruary F	ebruary 1954	February 1955	February 1954	Februa 1955	ry Febr	uary F	bruary 1 1955	February 1954
Feb., May, Aug., and Nov.; Cleveland, Obio	108. 106. 106. 101.	3 10 4 10 2 10	H. 7 H. 5 H. 4 H. 0 H. 4	107. 8 104. 9 106. 8 100. 4 105. 2	108. 9 106. 0 107. 4 109. 6 105. 6	95. 9 100. 3 100. 2 100. 8 94. 8	97. 100. 101. 100. 99.	7 129 9 120 9 110	3.4	116. 7 127. 4 120. 5 117. 5 114. 6	92. 7 90. 7 91. 5 86. 8 90. 1	92. 4 88. 7 90. 8 85. 7 90. 3
	January 1985	Janua 1964	ry Jan	mary J	anuary 1964	January 1955	January 1954	Januar 1955	y Janu		nuary 1955	January 1964
Jan., Apr., July, and Oct.: Boston, Mass. Kansas City, Mo Minnespois, Minn. Pittsburgh, Pa Portland, Oreg	101, 102, 104, 102, 106,	7 10 7 10 1 10	0.6 4.7 6.1 4.4 5.4	108.9 106.1 108.3 109.2 110.4	363. 2 167. 6 109. 4 266. 9 111. 2	98. 6 97. 0 99. 3 96. 0 97. 8	94.7 99.1 101.1 98.1	9 114 8 112 8 112	L 2 L 8 S. 5	111. 7 114. 7 113. 5 114. 0 120. 9	103. 2 87. 0 92. 2 97. 8 94. 6	99. 6 87. 7 92. 0 99. 2 93. 3

See footnotes at end of table.

TABLE D-6: Consumer Price Index 1—All items and commodity groups, except food,2 by city—Con.
[1947-49=100]

						Hot	aring					
	Total !	housing	R	ent	Gas and	electricity		is and fuel	Housefu	rnishings		old opera-
	March 1985	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1954	March 1955	March 1984
United States average	119.6	119.0	130.0	128.0	110.3	107.6	126.2	125.8	104.6	107. 2	117.9	117.
Monthly: Chicago, III	128.3 122.3 122.8 116.4 114.9	125.1 122.2 124.3 115.3 113.6	149. 4 (5) (6) (7)	138.9	110, 8 108, 9 113, 6 108, 8 102, 3	106. 2 110. 4 109. 5 108. 7 102. 3	128. 2 119. 9 (*) 130. 7 126. 9	124. 5 119. 4 (*) 130. 5 124. 0	106. 7 106. 5 107. 0 108. 1 106. 5	106, 9 110, 8 106, 9 107, 4 109, 3	121.1 111.8 108.3 119.1 114.3	121. 110. 108. 110.
Mar., June, Sept., and Dec.: Atlanta, Ga. Baltimore, Md. Cincinnali, Obio. St. Louis, Mo. San Francisco, Calif.	123. 9 115. 9 117. 3 119. 4 115. 9	124. 1 113. 8 116. 7 119. 1 118. 0	132, 3 125, 0 (*) (*) (*)	130, 5 123, 7 (*) (*)	113. 3 100. 1 118. 7 103. 8 132. 5	112.0 97.5 115.4 103.8 130.1	119. 8 127. 2 127. 2 127. 2 139. 6 (4)	119. 5 126. 9 127. 2 135. 1 (4)	107. 4 98. 5 100. 1 101. 7 103. 9	112.0 100.9 102.9 106.7 106.9	128. 5 110. 9 122. 3 119. 4 109. 3	128.1 100.1 121.4 119.6 109.6
	February 1955	February 1954	February 1985	February 1954	February 1955	February 1954	February 1955	February 1954	February 1988	Februar y 1954	February 1958	February 1984
Feb., May, Aug., and Nov.: Cleveland, Ohio Houston, Tex Scranton, Pa Seattle, Wash Washington, D. C	121. 2 123. 0 115. 9 120. 6 116. 4	119.1 123.6 116.4 118.3 117.7	142. 5 138. 9 (*) 136. 7	138. 8 138. 3 (*) 134. 8 (*)	106. 1 106. 8 119. 4 56. 5 118. 2	106. 8 106. 5 112. 2 58. 5 118. 1	124. 1 (6) 133. 2 127. 6 134. 7	124. 3 (*) 130. 9 127. 3 133. 3	102. 7 101. 3 100. 3 103. 5 105. 2	104. 0 102. 2 102. 3 106. 1 106. 2	111. 8 127. 0 100. 9 114. 2 116. 9	111. 4 129. 0 167. 6 111. 5 114. 7
	January 1955	January 1954	January 1955	January 1954	January 1955	January 1954	January 1955	January 1954	January 1955	January 1954	January 1955	January 1954
Jan., Apr., July, and Oct.: Boston, Mass Kansas City, Mo Minneapolis, Minn Pittsburgh, Pa Portland, Oreg	120, 0 120, 7 121, 3 116, 8 119, 4	117. 6 119. 0 119. 7 116. 4 118. 8	122. 8 (1) 140. 0 (1) 129. 6	120, 2 (*) 136, 6 (*) 128, 5	111. 7 117. 9 110. 9 118. 8 167. 8	108. 8 103. 0 110. 0 116. 7 105. 2	128. 1 113. 2 116. 5 118. 8 128. 0	124, 8 113, 2 114, 8 123, 2 127, 3	104, 3 103, 5 103, 6 103, 9 105, 4	106, 4 107, 7 106, 7 106, 6 107, 5	116, 7 122, 8 119, 2 120, 0 111, 7	112, 2 120, 9 118, 4 119, 9 113, 1

See footnote i to table D-1.
 See tables D-2, D-4, D-7, and D-8, for food.

See footnote 2 to table D-3.
Not available.

TABLE D-7: Consumer Price Index '-Food and its subgroups, by city

[1947-49-100]

		Cotal food ²					Fe	od at hom	•			
City	,	otal food		Tota	food at h	ome	Cereals as	od bakery	products	Meats,	poultry, a	nd fish
	Mar. 1955	Peb. 1955	Mar. 1984	Mar. 1988	Feb. 1955	Mar. 1954	Mar. 1955	Feb. 1955	Mar. 1984	Mar. 1955	Feb. 1955	Mar. 1954
United States average *	110.8	110. 8	112.1	109.7	100.6	111.4	123. 9	123.8	121. 2	102.3	102.5	109.
Atlanta, Ga. Baitimore, Md. Boston, Mass. Chicago, III. Cincinnati, Ohio	110. 0 111. 7 109. 0 108. 3 111. 7	110. 1 111. 7 100. 4 108. 7 111. 9	112. 2 113. 6 109. 3 110. 7 114. 1	108, 2 110, 3 107, 6 106, 6 110, 7	108. 3 110. 3 107. 9 107. 3 111. 1	111. 2 112. 7 107. 9 109. 7 113. 7	117. 9 122. 0 119. 1 119. 2 125. 1	117. 7 122. 2 119. 0 120. 7 124. 8	116. 0 121. 6 119. 1 117. 0 118. 4	105. 3 103. 7 100. 0 95. 4 102. 8	106. 3 104. 2 100. 6 96. 9 103. 9	116, 1 112, 1 105, 1 105, 1
Cleveland, Obio	108. 6 113. 0 110. 7 106. 9 112. 0	106. 8 113. 3 110. 2 107. 3 111. 1	110. 3 114. 7 112. 7 108. 4 113. 4	107. 4 111. 6 109. 5 106. 2 110. 2	107. 7 112. 0 108. 9 105. 7 100. 4	109. 4 113. 7 111. 7 107. 8 112. 1	120. 4 120. 0 118. 8 120. 7 127. 8	120. 6 120. 0 118. 7 120. 6 127. 8	118.6 117.8 118.3 120.4 122.6	99. 7 100. 1 100. 8 96. 9 101. 6	99. 7 101. 3 99. 7 97. 0 101. 1	108.3 108.3 106.6 110.4
Minneapolis, Minn New York, N. Y Philadelphia, Pa Pittaburgh, Pa Portiand, Orag	111.3 111.0 113.3 111.0 109.7	111. 1 111. 1 113. 2 111. 0 109. 2	112. 4 109. 9 113. 7 113. 2 112. 7	110. 7 110. 0 112. 1 110. 1 109. 0	110. 5 110. 2 112. 1 110. 1 108. 4	112. 1 109. 3 112. 6 112. 8 112. 6	125, 9 128, 2 121, 0 124, 4 124, 2	125. 8 128. 3 121. 0 124. 5 123. 9	124. 9 125. 1 120. 6 121. 7 116. 2	97. 5 106. 4 106. 3 98. 3 101. 6	98. 3 106. 2 106. 4 98. 6 102. 1	104. 3 107. 6 110. 8 105. 8
Rt. Louis, Mo	111. 8 113. 1 108. 7 112. 4 110. 9	111.7 113.0 108.7 112.1 110.9	114. 9 113. 2 111. 2 112. 2 110. 3	109, 2 112, 3 108, 6 111, 9 109, 5	109. 4 112. 1 108. 6 111. 4 109. 5	113. 3 112. 3 110. 7 112. 0 100. 5	118. 9 130. 7 118. 6 127. 5 122. 3	118.8 130.2 118.5 127.4 122.5	116. 5 127. 4 119. 4 122. 2 118. 4	101. 3 106. 2 100. 9 101. 7 100. 1	102. 2 105. 7 102. 0 101. 9 100. 1	110. 4 109. 4 109. 4 110. 2

				Food at	home-Con	tinued			
City	De	siry product		Fruit	s and vegeta	ibles	Othe	r foods at ho	me •
	Mar.	Feb.	Mar.	Mar.	Feb.	Mar.	Mar.	Feb.	Mar.
	1955	1955	1984	1955	1985	1954	1955	1955	1954
United States average	105. 4	106. 1	108.0	112.0	110.7	107. 8	111.9	112.1	112.3
Atlanta, Ga Baltimore, Md Boaton, Mass Chicago, III. Cincinnati, Ohio	108, 4	108, 4	109, 5	110.0	108. 9	105. 5	103. 9	104. 1	105. 7
	108, 3	108, 5	111, 9	110.0	108. 7	107. 5	112. 1	112. 2	111. 6
	108, 0	110, 7	108, 5	107.8	107. 5	101. 0	107. 2	106. 2	105. 8
	105, 5	105, 3	107, 1	108.5	108. 4	105. 8	117. 3	117. 6	119. 6
	106, 5	110, 3	111, 4	109.5	106. 9	104. 7	117. 9	117. 4	118. 1
Cleveland, Oble Detroit, Mich Houston, Ter Kansse City, Mo. Los Angeles, Calif.	99. 6	103. 0	104. 8	105, 9	105. 7	103. 3	116. 4	115. 2	116. 2
	102. 8	106. 9	108. 1	124, 9	122. 2	116. 3	114. 3	113. 2	114. 8
	108. 8	108. 7	110. 0	116, 6	113. 1	110. 7	109. 6	111. 1	112. 7
	108. 0	108. 6	101. 2	103, 0	103. 4	102. 9	105. 5	106. 6	108. 6
	102. 9	103. 0	106. 3	115, 6	111. 6	112. 8	111. 2	111. 4	111. 1
Minneapolis, Minn	103. 1	102. 4	104. 7	118, 3	116.6	117. 3	121. 9	121. 5	118, 2
	104. 2	106. 1	106. 4	105, 4	105.1	100. 8	113. 3	113. 2	112, 1
	109. 2	109. 2	110. 8	114, 3	113.6	108. 7	112. 8	112. 9	112, 3
	109. 7	109. 7	112. 1	107, 5	106.5	107. 2	120. 9	119. 3	122, 3
	103. 5	102. 8	109. 1	114, 4	111.7	110. 0	109. 4	109. 3	113, 6
8t. Louis, Mo	91, 5	93, 9	101. 6	118, 5	117. 4	115, 3	120, 8	119. 5	121. 9
	104, 9	105, 0	106. 8	118, 2	115. 6	116, 0	110, 4	112. 3	108. 4
	107, 7	108, 0	109. 4	108, 5	107. 4	102, 5	111, 1	110. 3	111. 3
	108, 2	106, 2	105. 7	122, 0	119. 4	113, 0	110, 5	111. 7	110. 9
	111, 0	110, 9	113. 8	107, 8	108. 5	104, 1	112, 1	111. 9	109. 9

¹ See footnote 1 to table D-1. Indexes for 56 cities for total food (1935-39=100 or June 1940=100) were published in the March 1953 Monthly Labor Review and in previous issues. See table D-8 for U. S. average prices for 46 cities combined.

See footnote 2 to table D-1.
A verage of 46 cities beginning January 1953. See footnote 1 to table D-1.
See footnote 3 to table D-2.

TABLE D-8: Average retail prices of selected foods

Commodity	Mar. 1955	Feb. 1985	Mar. 1984	Commodity	Mar. 1955	Peb. 1988	Mar. 1954
Cereals and bakery products:	Cents	Cents	Cents	All fruits and vegetables—Continued			
Flour, wheat	54.1	54.1	53. 6	Fresh fruits and vegetables—Continued	Cents	Cente	Cents
Biscuit mix 1	27.4	27.4	27.7	Peaches*pound	*******		******
Cornmeal 1pound	12.6	12.6	12.5	Strawberries* pint. Grapes, seedless* pound.	*******	******	******
Rice 1	17.8	17.6	19.7	Grapes, seedlesspound	*******		
Rolled oats	22.0	18.9	18.5	Watermelons* do Potatoes ii 10 pounds	******	*******	*******
Bread pound	17.7	17. 7	17.0	Potatoes "	15.1	34.0	13.1
Rode crackers	27.0	27.0	27.1	Sweetpotatoespounddo	7.4	7.7	8.5
Soda crackers do	23.8	23.8	23.6	Carrots	13.0	13.2	11.
Meats noultry and fish:	20.0	20.0	20.0	Lettuce head	17.4	17.0	14.1
Meats, poultry, and fish: Beef and veal:				Celery pound	15 8	15.1	13.6
Round steak 1pound.	91.0	92.1	88.4	Cabbagedo	7.8	8.7	7.4
Chuck roastdo	82.1	82.6	51.0	Tomatoesdo	34.2	30, 8	30.6
Rlb roast 1dodo	71.5	72.4	69. 6	Beans, greendo	22.8	27.4	26.6
Hamburgerdo	39.7	39.7	40.9	Canned fruits and vegetables:		411.6	
Veal cutlets 1do	110.5	113.0	112.1	Orange juice	32.7	33.1	33. 4
Pork:				Peaches	33.4	33. 2	32. 9
Pork chops, center cutdo	74.3	75.7	85.7	Pineappledo	39.0	38.9	38.7
Bacon, sliceddo	66.7	69. 0	88. 0	Fruit cocktail do	40.7	40, 9	41.1
Ham, wholedo	59, 4	61.3	72.2	Corn, cream style	17.0	17.2	18.6
Lamb, leg 1do	68.1	68.6	70.7	Peas, greendo	21.4	21.5	21. 3
Other meats:	F9 4		** *	Tomatoes D. H	15.0	14.9	17.3
Frankfurters doLuncheon meat, canned	53. 4 45. 4	83.4	56.1	Tomatoes 15.11	9.7	9.7	9.8
Poultry:	90.9	46.3	01. 4	Dried fruits and vegetables:	99.7	99.6	90.0
Frying chickens:				Prunespound	32.7	32.5	29. 8 17. 3
Dressed ? normA	48.9	46.3	43.9	Navy beansdodo	10.0	18.0	11.0
Dressed 1pound. Ready-to-cook 4do	89. 4	54.6	54. 5	Partially prepared foods:			
Fish:	00. 0	04.0	04.0	Vegetable soup	14.2	14.2	14.3
Ocean perch fillet, frosendo	42.7	43.4	43.6	Beans with pork16-ounce can	14.8	14.8	14.3
Haddock, filiet, frozendo	47.5	48.1	80.0	Condiments and sauces:	20.0	14.0	****
Salmon, pink16-ounce can	54.6	54.2	51.3	Pickles, sweet # 714 ounces	28.2	28.3	30.1
Tuna fish	37.9	38.0	39. 2	Catsup, tomato14 ounces	22.3	22.2	22, 2
Dairy products:				Beverages, ponalconome:			
Mflk, fresh (grocery),quart	21.8	22.1	21. 9	Coffeepound	94.2	97.0	105. 2
Milk, fresh (delivered) 1do	22.9	23. 2	23. 3	Tea	40.2	38.9	33. 2
lce creampint	29. 2	29. 2	29.7	Cola drinkearton of 6, 6-ounce	32.5	32.5	30.9
Butterpound.	71.0	71.2	78.4	Pats and oils:			
Cheese, American processdo	87.8	57.8	58.9	Shortening, hydrogenatedpound	35, 2	35.3	34. 8
Milk, evaporated	13.7	13.7	14.3	Margarine, coloreddo	29. 2	29.3	29.7
Ill fruits and vegetables: Frozen fruits and vegetables:				Larddo	21.1	21.9	25, 6 35, 8
Strowberries 1	30.8	20.0	36.9	Salad dressingpint	88.4	35.4	49. 2
Orange juice concentrate	17.7	30.7	17.0	Peanut butterpound	00. 9	52.6	99. 2
Peas, green 19	19.5	19.4	19. 4		52.2	82.3	52. B
Beans, greendo	24.2	24.2	24.5	Sugar	23.7	23.7	23. 6
Fresh fruits and vegetables:	21. 2	41.4	24.0	Grane lelly 12 ourses	25.9	25.8	25. 0
Applespound.	14.3	14.2	15.1	Grape Jelly	4.6	4.6	4. 5
Bananas	17.0	16.8	16.7	Eggs fresh dozen	60.2	89.0	57.9
Bananas do Oranges, size 200 dozen	48.2	44.6	46.1	Miscellaneous foods:	90.0		
Lemonspound.	18.1	18.5	18.3	Gelatin, flavored3-4 ounces	8.6	8.6	8.6
Grapefruit*each	5	9.6	9.9		-		-

Nors.—The United States average retail food prices appearing in table D-4 are based on prices collected monthly in 46 cities for use in the calculation of the food component of the reader Consumer Price Index. Average retail food prices for each of 20 large cities are published monthly and are available upon request. Prices for the 26 medium-size and small cities are not published on an individual city basis.

^{1 45} cities.
1 30 cities.
1 33 cities.
1 33 cities.
1 44 cities.
1 35 cities.
1 5 cities.
1 5 cities.
1 5 cities.
1 5 pecification changed from 12 ounces to 10 ounces, effective October 1954.
18 Specification changed from 12 ounces to 10 ounces, effective February

Specification changed from 12 ounces to 10 ounces, effective February 1954
 Unit changed to 10 pounds, effective January 1955.
 Specification changed from No. 2 can to No. 303 can, effective October 1954.

Formerly listed as sweet gherkins.
 Specification changed from I-ounce to %-ounce bar, effective January 1988.
 Priced only in season.

TABLE D-9: Indexes of wholesale prices, by group and subgroup of commodities 1

				1947-49-	100]									
Commodity group	Mar. 1955	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oet. 1954	Sept. 1984	Aug. 1954	July 1954	June 1954	May 1954	Apr. 1954	Mar. 1954	June 1980
All commodities	110.6	110.4	110.1	109. 8	110.0	100.7	110.0	110. 5	110.4	110.0	110.0	111.0	110. 5	100. 2
Farm products Fresh and dried produces Oralra Livestock and positry Plant and animal fibers Fluid milk Eggs Hay and seeds Other farm products		103.8 98.1 98.7 9 104.3 92.0 90.1 93.2	93. 5 79. 4 104. 4 92. 4 65. 1 94. 3	96. 9 92. 8 74. 0 105. 0 93. 6 64. 0 93. 8	103. 2 93. 6 76. 4 104. 5 95. 1 83. 8	7101.9 92.9 77.8 107.1 93.8 82.8 91.7	93. 6 99. 8 93. 6 80. 7 107. 4 91. 7 77. 3 87. 5 164. 6	91. 2 83. 4 106. 7 86. 4 94. 2	88. 1 83. 2 107. 2 87. 7 84. 4	96.6 86.5 87.7 106.9 83.7 70.8 96.0	97. 9 104. 4 91. 2 93. 0 107. 0 84. 1 69. 0 95. 3 181. 2	99. 4 97. 4 92. 9 94. 9 105. 5 88. 3 77. 9 96. 5 182. 2	93. 0 92. 4 105. 9 98. 4 80. 1 98. 4	80. 6
Processed funds Coreal and bakery products Meats, poultry fish Dairy products and ice cream. Canned, frosen, fruits and vegetables Sugar and confectionery Packaged beverage materials. A nimal fats and oils. Crude vegetable oils Refined vegetable oils Vegetable oil end products. Other processed foods	101. 6 116. 5 83. 3 107. 2 105. 0 110. 8 180. 4 68. 0 63. 5 70. 9 82. 4 100. 8	116. 3 86. 9 107. 2 *104. 4 112. 6 186. 4 60. 2 65. 1 73. 7 83. 6	103.8 116.9 87.6 107.0 104.6 111.3 203.7 74.4 64.8 73.9 83.4 98.2	85. 2 106. 2 106. 0 111. 6	103. 8 116. 5 86. 3 108. 8 105. 5 112. 3 197. 8 84. 8 65. 1 73. 2 83. 1 97. 8	114. 5 85. 8 108. 7 105. 5 112. 0	105. 5 113. 8 92. 0 106. 6 105. 0 113. 0 206. 0 95. 2 69. 0 76. 5 87. 3 103. 5	92. 0 105. 9 104. 8 114. 5	106, 5 114, 0 94, 1 105, 1 104, 7 113, 7 251, 8 94, 0 72, 2 79, 1 87, 3 101, 4	106. 0 113. 5 92. 3 102. 4 104. 7 113. 3 231. 8 90. 0 73. 0 79. 1 87. 3 96. 8	106. 8 113. 3 98. 3 101. 7 104. 5 113. 1 229. 6 90. 7 71. 8 76. 4 87. 2 101. 3	105. 9 113. 2 94. 3 103. 0 103. 3 112. 6 229. 6 106. 5 72. 1 76. 5 84. 4 102. 9	105. 3 112. 6 92. 8 106. 1 103. 0 112. 8 206. 1 95. 3 67. 9 73. 1 83. 2 106. 5	96, 8 96, 8 182, 6 90, 6 94, 7 136, 9 67, 6 67, 4 79, 2 106, 6
All commodities other than farm and foods	115.6	*115.7	115. 2	114.9	114.8	114. 8	114. 4	114. 4	114. 3	114. 2	114.5	114. 5	114.2	102, 2
Textile products and apparal Cotton products. Wood products. Synthetic textiles Silk products. Apparel Other textile products.	95. 3 90. 8 106. 1 87. 6 121. 1 98. 2 76. 6	*95. 2 *90. 6 *106. 3 86. 7 122. 4 *98. 2 78. 0	96. 2 90. 2 106. 6 87. 3 124. 1 98. 2 77. 3	95. 2 89. 9 106. 7 87. 2 123. 9 98. 4 76. 9	95. 2 99. 9 106. 6 86. 9 127. 4 98. 4 77. 6	95. 4 89. 9 108. 4 86. 1 127. 0 98. 6 80. 9	95. 3 89. 2 109. 6 85. 8 128. 4 98. 6 80. 3	95. 3 89. 1 110. 3 85. 7 126. 3 98. 6 79. 8	98. 1 88. 9 109. 8 85. 7 124. 2 98. 4 79. 1	94. 9 88. 4 110. 1 85. 6 123. 9 98. 1 79. 0	94. 8 88. 3 109. 5 85. 2 131. 6 98. 2 78. 8	94. 7 88. 5 100. 2 84. 6 132. 3 98. 2 78. 9	95. 0 88. 5 109. 3 84. 9 135. 1 96. 6 80. 6	93, 8 90, 0 105, 8 91, 3 88, 9 92, 7 94, 3
Hides, ekins, and leather products. Hides and skins. Leather Footwest Other leather products	92. 2 50. 7 82. 1 111. 5 96. 0	92. 3 51. 6 82. 2 111. 5 95. 8	91. 9 49. 5 81. 2 111. 6 95. 8	91. 8 47. 4 81. 5 111. 6 95. 9	92.8 52.7 82.0 111.7 96.0	92. 4 49. 5 82. 1 111. 8 96. 1	98.0 51.5 82.9 111.8 96.5	94. 0 55. 8 84. 4 111. 8 96. 7	94.9 58.2 86.5 111.8 97.0	95. 6 60. 6 87. 4 111. 9 97. 5	96.0 62.5 87.6 111.9 97.5	94.6 56.5 55.0 111.9 97.4	94. 7 56. 0 66. 3 111. 9 97. 6	99, 1 94, 3 98, 2 102, 7 95, 2
Fuel, power, and lighting materials Costs Costs Gas Electricity Patroleum and products	108. 7 106. 1 132. 4 116. 3 100. 1 111. 7	*108.7 *105.2 132.4 *116.3 *100.1 111.7	108. 5 105. 2 132. 4 113. 0 100. 7 111. 7	107. 5 105. 2 132. 4 110. 2 100. 7 110. 4	107. 4 105. 1 132. 4 107. 3 103. 0 109. 5	105. 9 105. 1 132. 4 105. 8 101. 8 109. 3	106. 9 105. 5 132. 4 106. 0 101. 2 109. 4	106. 9 105. 2 132. 4 106. 4 102. 4 109. 3	106. 2 104. 9 132. 4 105. 4 101. 8 108. 2	107. 8 104. 7 132. 4 107. 8 101. 8 110. 9	108. 2 104. 6 132. 4 109. 0 101. 8 111. 7	108.6 104.1 132.4 112.3 101.8 112.1	109. 2 107. 9 132. 5 111. 5 102. 9 111. 8	102, 4 104, 6 115, 6 94, 8 101, 3 103, 1
Chemicals and alited products. Industrial chemicals Prepared paint. Paint materials Drugs and pharmaceuticals 6 Fats and oils, inecitib Mixed fertilizer Fertilizer materials Other chemicals and products 4.	106, 9 117, 5 114, 0 96, 9 93, 1 55, 2 108, 9 113, 6 107, 9	*107. 1 117. 4 113. 1 96. 1 *93. 3 61. 0 *109. 0 113. 5 108. 0	107. 1 117. 3 112. 8 95. 8 93. 6 61. 8 108. 8 113. 6 107. 7	107. 0 117. 4 112. 8 96. 2 93. 6 59. 3 108. 9 113. 3 107. 9	107. 0 117. 7 112. 8 94. 6 93. 6 57. 8 109. 1 112. 2 107. 6	106, 9 117, 6 112, 8 97, 2: 93, 6 56, 5 109, 2 112, 1 107, 6	106. 8 117. 4 112. 8 97. 0 94. 0 84. 0 109. 3 112. 3 107. 6	106. 8 117. 4 112. 8 97. 8 94. 0 53. 5 109. 8 112. 1 107. 6	106. 7 117. 1 112. 8 97. 6 94. 0 82. 0 109. 7 112. 1 107. 9	106. 8 117. 0 112. 8 96. 8 94. 0 55. 7 109. 9 111. 6 107. 7	107. 1 117. 3 112. 8 95. 3 94. 0 59. 3 109. 9 114. 0 108. 1	107. 2 117. 4 112. 8 94. 7 94. 0 59. 8 109. 9 114. 1 106. 1	107. 4 117. 9 112. 8 95. 2 93. 9 50. 5 110. 0 114. 0 108. 1	92.1 96.3 98.0 86.8 91.3 46.8 101.2 98.5
Rubber and products. Crude rubber Tire essings and tubes. Other rubber products.	142.8	*140.6 151.3 *142.4 *132.0	136.8 146.0 139.9 127.9	132. 0 137. 6 134. 0 125. 2	131. 4 134. 1 134. 9 125. 4	128. 5 132. 0 129. 6 125. 2	126, 9 125, 6 129, 6 124, 0	126. 4 123. 5 129. 6 123. 7	126. 8 126. 8 129. 3 123. 7	126. 1 122. 8 129. 3 123. 7	125, 1 117, 5 129, 3 129, 7	125. 0 117. 0 129. 3 123. 7	124. 9 113. 8 130. 3 123. 7	109 5 129 0 106 1 103 6
Lumber and wood products Lumber Millwork Plywood	121, 6	*121, 2 *121, 4 129, 0 *104, 8	120. 3 120. 0 130. 4 104. 7	120, 0 119, 8 130, 3 104, 3	119.9 119.6 130.2 104.3	119. 8 119. 5 130. 2 104. 3	119.3 119.0 130.2 103.2	119. 1 118. 7 129. 7 105. 4	119. 1 118. 6 130. 7 103. 0	116.3 115.5 130.8 99.7	116, 1 115, 0 130, 8, 101, 4	116. 2 115. 3 130. 8 100. 7	116. 7 118. 6 131. 1 102. 9	112, 4 113, 8 110, 9 101, 7
Pulp, paper, and allied products Woodpsilp Wastepaper Paper Paper Paperboard Converted paper and paperboard Building paper and board	116. 8 110. 0 89. 4 128. 0 125. 7 111. 5 129. 7	116.6 110.0 90.2 128.0 124.0 111.5 129.4	116. 3 110. 0 90. 2 127. 8 124. 0 111. 1 127. 6	115, 9 109, 6 85, 5 126, 9 124, 1 111, 0 127, 6	116.0 109.6 87.3 126.8 124.1 111.3 127.6	116. 3 109. 6 83. 8 125. 5 124. 2 111. 9 127. 6	116. 3 109. 6 80. 0 126. 5 124. 2 112. 0 127. 6	116. 3 109. 6 80. 0 126. 5 124. 2 112. 0 127. 6	116. 2 109. 6 79. 2 126. 6 124. 2 111. 9 127. 9	124. 2 111. 5	115. 9 109. 7 67. 2 126. 5 124. 4 111. 5 127. 9	116. 3 109. 7 83. 2 126. 8 124. 8 111. 8 127. 9	116. 6 106. 7 84. 1 126. 8 124. 6 112. 3 127. 9	95, 9 90, 6 79, 0 103, 3 97, 2 93, 2 106, 3
Metals and metal products Iron and steel	131. 9 136. 2 134. 3 131. 6 144. 1 123. 0 113. 6 117. 9 125. 9	131. 5 135. 8 133. 7 131. 6 143. 3 118. 7 113. 7 •119. 0 125. 8	130. 1 135. 8 127. 9 131. 6 142. 6 118. 7 113. 9 117. 8 125. 8	129. 8 135. 0 127. 6 131. 6 142. 3 118. 7 114. 3 117. 8 125. 9	129. 9 135. 5 127. 2 131. 6 142. 0 118. 7 114. 3 117. 4 126. 2	135.0 127.4 131.2 141.6 118.7 114.3 117.9	114. 1 118. 0	114.1	124. 2 130. 3 138. 2 118. 5 114. 0 118. 9	131. 8 123. 7 130. 0 137. 9 116. 5 113. 8 115. 9	113.9 116.5	126. 8 131. 1 123. 4 130. 0 138. 5 118. 2 114. 5 116. 6 125. 3	121 2 130.0 138.0 118.2 114.4 115.8	108, 8 113, 1 101, 8 109, 0 111, 1 103, 2 102, 0 100, 1 113, 2

See footnotes at end of table.

Table D-9: Indexes of wholesale prices, by group and subgroup of commodities '-Continued [1947-49-100]

Commodity group	Mar. 1955 1	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1984	Aug. 1954	July 1934	June 1954	May 1954	Apr. 1954	Mar. 1954	June 1950
Machinery and motive products	126. 2	*126. 1	125.8	125.7	125. 3	124. 3	124.4	124.8	124. 8	124. 3	194.4	124.4	124. 5	106.
Agricultural machinery and equipment	121.6		121. 5	121. 2	121. 3	122.0	121. 6	122. 1	122.3	122.3	122.6	122.3	122.3	106,
Construction machinery and equipment	133.9		183. 2	132.6	131. 8	131.6	131.6	131. 8	131. 8	131. 5	131. 5	131.6	131.7	106.
Metalworking machinery and equipment	136. 8		135. 1	134.7	134.0	134.0	133.3	132.7	132.6	132.6	132.6	132 6	133.0	106.
General purpose machinery and equipment	130.7		128.6	128. 2	128.1	128.1	128.1	127. 9	127.8		128. 2	128.2	128. 8	107.
Miscellaneous machinery	126. 6		126, 4	126.0	126.0	126. 1	125. 9	125. 6	125. 5	125, 5	125. 2	125. 2	125. 1	108,
Electrical machinery and equipment	126.7	*126.7	126.8	126.8	126.7	125. 2	125.6	125.7	125.8	118.9	126.0	126. 5	126.8	100.
Motor vehicles	121. 5	*121. 5	121.7	131.7	121.0	118.6	118.9	118.9	118.9	110. 0	118.9	118.0	118. 9	106.
urniture and other household durables	115. 1	115.4	115. 5	115.7	115.6	115.6	115.3	115.3	115.3	118.4	115.8	118.6	118.0	102.
Household furniture	112.7	*112.6	112.5	112.9	112.9	112.8	112.8	112.9	112.8	118. 1	113. 5	113.6	113.7	101.
Commercial furniture	128.6		128.6	128.6	128.6	127.3	126. 2	126. 2	126. 2	126. 2	126. 2	126.2	126.2	106.
Ploor covering	124. 4	124. 4	124. 2	124.0	124.0	124.0	124. 4	123. 5	122.7	122.6	122.6	122.6	122.6	100.
Household appliances	107.3	108.5	108. 7	109, 4	109.1	109. 5	109.4	109.7	109.7	109. 8	100.9	100.9	109. 8	100.
Television and radio receivers	93. 1	*93. 2	93. 5	(9)	(0)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(7)
Other household durable goods	132.0	132.0	131. 9	131. 5	131. 5	131. 3	130.5	130.4	130. 4	130. 4	180.4	130.4	128. 2	106.
conmetallic minerals -structural	121.9	*121.8	122.0	121.8	121.8	121.9	121.7	120. 8	120.4	119.1	119.3	126.8	121.0	108.
Flat glass	123.9	123.9	123.9	123.9	123.9	123. 9	123.9	124.7	124.7	124.7	124.7	124.7	124.7	105.
Concrete ingredients	124.1	*123.9	123.1	122. 3	122. 1	122.1	122.1	122. 2	122.1	120. 1	120.0	119.8	119.9	108.
Concrete products	118.2		116.7	117.4	117.4	117.8	117.8	117. 9	117.7	117. 8	117.3	117.3	117.3	104.
Structural clay products		136. 1	135.8	185. 4	135. 4	135.4	135. 4	132.3	132.0	132.0	132.0	132 0	132.0	110.
Gypsum products	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122. 1	122.1	122.1	122.1	122.1	103.
Prepared asphalt roofing	99. 1	*100.4	106.1	106. 1	106.1	106.1	104. 1	96. 6	98. 5	94. 2	96. 3	108.4	109.9	96.1
Other nonmetalife minerals	119.2	119. 2	119. 2	119. 5	119. 5	120.8	120.8	120. 8	120. 2	120. 2	120. 2	120. 2	119.8	108.7
obacco manufactures and bottled beverages	121.6	121.6	121.4	121.4	121.4	121. 8	121.5	121. 8	121.4	121.4	121.4	121.8	117.9	101. 4
Cigarettes	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	134.0	100.
Cigare	103.7	103. 7	103. 7	103.7	103. 7	103.7	108.7	103. 7	108.7	108. 5	108. 8	103. 5	108. 8	100.6
Other tobareo products	121. 4	121.4	121.4	121. 4	121.4	121.4	121.4	121. 4	121. 4	120.7	120.7	120.7	120.7	100.1
Alcoholic beverages	114.7	114.6	114. 3	114.3	114.3	114.3	114.3	114.3	114. 2	114. 3	114.3	114.6	114.6	100.1
Nonaleoholie beverages	148. 1	148. 1	148. 1	148.1	148.1	148. 1	148.1	148.1	145. 1	148.1	147. 9	147.9	128.1	100.
Iscellaneous	95.6	*97.1	97.0	95.0	97.0	96.7	99.1	102.3	103.9	105.1	109.2	110.3	104.9	96.1
Toys, sporting goods, small arms	113. 2	*113.1	113. 2	112.9	112.8	112.7	112.7	113.4	113. 6	113.6	113.6	113.6	113.0	104.
Manufactured animal feeds	83. 1	85.8	84.9	86.8	85.0	84. 3	89.0	95. 2	96.3	100 6	109.1	111.1	101. 1	93. 1
Notions and accessories	92.3	*92.2	101.3	101. 2	101. 2	101. 2	101. 2	161.6	101.6	101.6	98. 5	93. 5	93. 8	66. 1
Jeweiry, watches, photo equipment	103.1	*103.2	103.6	103. 5	103.5	103. 5	103. 2	102.8	102.7	102.7	102.3	102.7	102.0	96.6
Other miscellaneous	120.6	120.6	120.3	121.0	120.9	120.8	121. 2	121. 2	121. 2	121. 8	121.3	121. 3	121. 2	108.4

¹ The revised wholesale price index (1947-49=100) is the official index for January 1952 and subsequent months. The official index for December 1951 and previous dates is the former index (1956-190). The revised index has been computed back to January 1947 for purposes of comparison and analysis. Prices are collected from manufacturers and other producers. In some cases they are secured from trade publications or from other Government agencies which collect price quotations in the course of their regular work. For a more detailed description of the index, see A Description of the Revised Wholesale Price Index, Monthly Labor Review, February 1982 (p. 180), or reprint Serial No. R. 2067.

Beginning with the final wholesale price index for January 1955, the index weights are based on an average of the dollar value of primary market transactions in calender years 1952 and 1953. Previously, the weights were based on the dollar value of transactions in 1947. The weight revision does not affect the comparability of the indexes.

Preliminary.
Not available.
Cosmetics and related products moved from drugs and pharmaceuticals subgroup to other chemicals and products subgroup.
Revised.

TABLE D-10: Special wholesale price indexes1

[1947-49-100]

C		1955						19	54					1980
Commodity group	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Sept.	Aug.	July	June	May	Apr.	Mar.	June
All foods	100.8	102.5	101. 9	101.0	102.7 102.8	102.4	103.7	105.8	105.6	102.7 97.4	104.6	108.9	103.0	95.
All fish Special metals and metal products Metalworking machinery Machinery and equipment	129. 1 143. 0	*128.9 *142.7 *128.6	128. 0 140. 7 128. 1	127.7 140.1	127. 6 140. 1 127. 7	127. 1 140. 2 127. 4	126.6 140.2 127.4	126, 3 140, 2	125. 8 139. 9 127. 2	125. 2 139. 6 127. 3	125, 2 139, 9 127, 4	125 0 130 0 127 5	124.6	108. 109. 106.
Total tractors	122. 4 145. 8	*122.4 145.8	122. 2 145. 7	121.9 145.8	122.0 145.8	123. 2 145. 8	123. 2	123. 2 145. 6	123.9 145.6	123.9	123.9	123.9	123.7 141.0	107.
Building materials loaps Synthetic detergents	98.3	122.5 *98.9 93.4	122.1 97.4 93.4	122.0 96.9 93.4	96. 4 97. 4	121.7 94.1	121.8 96.1	95. 0 93. 4	96.6 93.4	95.3 93.4	97. 1 97. 4	119, 6 97, 1 93, 4	97. 1 98. 4	107. 89.
Refined petroleum products	110.1	109. 9 106. 5	109. 9 105. 3 107. 5	106. 4 105. 3 105. 5	107. 4 102. 9 105. 2	107. 2 102. 9 104. 6	107. 3 101. 1 104. 0	107. 2 101. 1 103. 7	105.9 104.7 102.8	106, 1 106, 1 104, 8	110.0 107.8	110. 5 108. 1 105. 7	109. 7 108. 7 106. 2	102.
Mid-continent petroleum Gulf coast petroleum Pacific coast petroleum	118.5 105.4	118.5 105.4	117. 9 106. 9	116. 9 103. 1	115. 9 102. 6	115.9 102.6	114.9	114.9	109.0 108.8	118.1	113, 1	114.1	110.0	101. 100. 94
Pulp, paper and products, excl. bidg. paper	116.5	116.4 •112.1	116.0 112.2 118.9	115. 7 112. 2	115. 8 112, 3	116.0 112.1	116.0 110.8 117.8	116. 0 108. 5	115.9	118. 5 104. 2 114. 3	115, 5 108, 6 114, 0	116.1 103.7	116.3 106.3	95. 106. 112.
All commodities except farm products.	113. 1	113.4	113. 2	112.9	112.8	112.8	112.8	113.0	112.9	112.6	113. 1	112.9	112.6	101.

i See footnote 1, table D-9.

Preliminary.

^{*} Ravised.

TABLE D-9: Indexes of wholesale prices, by group and subgroup of commodities 1

			11	947-49-	real									
Commodity group	Mar. 1955 1	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1954	Oct. 1954	Sept. 1984	Aug. 1984	July 1954	June 1954	May 1954	Apr. 1954	Mar. 1954	June 1950
All commodities	110.0	110.4	110.1	109. 5	110.0	100.7	110.0	110. 5	110. 4	110.0	110.0	111.0	110. 5	100, 2
Farm products Frash and dried produce. Oratus Livestock and positry Plant and animal fibers. Finit milk Rggs. Hay and seeds Other farm products.	93. 1 143. 0	108.8 98.1 98.7 104.3 92.0 90.1 90.2	92. 5 105. 2 93. 5 79. 4 104. 4 92. 4 65. 1 94. 3 156. 4	91.0	93. 2 103. 2 93. 5 76. 4 104. 5 95. 1 83. 5 92. 0 164. 6	101.9 92.9 77.8 167.1 93.8 82.8 91.7	93. 6 90. 8 93. 6 80. 7 107. 4 91. 7 77. 3 87. 5 164. 6	95. 8 108. 3 91. 2 83. 4 106. 7 89. 7 86. 4 94. 2 168. 8	96. 2 110. 9 88. 1 83. 2 107. 2 87. 7 84. 4 94. 8 184. 0	94. 8 94. 6 85. 5 87. 7 166. 9 83. 7 70. 8 95. 0 181. 7	97. 9 104. 4 91. 2 93. 0 107. 0 84. 1 60. 0 95. 3 181. 2	90. 4 97. 4 92. 9 94. 9 105. 5 88. 3 77. 9 96. 5 182. 2	96. 4 89. 6 92. 6 106. 9 93. 4 80. 1 63. 4 181. 2	94 7 89 8 89 6 99 8 107, 3 81, 6 70, 6 87, 6
Processed foods Coreal and bakery products Mests, poultry fish Dairy products and loc cream Canned, frosen, fruits and vegetables Sugar and confectionery Packaged beverage materials Animal fats and oils Crude vegetable oils Refined vegetable oils Vegetable oils ofter products Other processed foods	101. 6 116. 5 83. 3 107. 2 108. 0 110. 8 180. 4 68. 0 63. 5 70. 9 82. 4 100. 8	116. 8 66. 9 107. 2 *104. 4 112. 6 185. 4 69. 2 65. 1 73. 7 83. 6	103. 8 116. 9 87. 6 107. 0 104. 6 111. 3 203. 7 74. 4 64. 8 73. 9 83. 4 98. 2	103. 5 116. 8 85. 2 106. 0 111. 6 203. 4 77. 3 65. 6 73. 7 83. 5 98. 4	103. 8 116. 5 86. 3 108. 8 105. 5 112. 3 197. 8 84. 8 65. 1 73. 2 83. 1 97. 8	103. 7 114. 5 85. 8 109. 7 105. 5 112. 0 206. 3 84. 5 65. 0 78. 4 84. 5 99. 8	105. 5 113. 8 92. 0 106. 6 105. 0 113. 0 206. 0 206. 0 96. 2 69. 0 76. 5 87. 3 103. 5	105. 4 113. 2 92. 0 105. 9 104. 8 114. 5 226. 8 96. 9 73. 5 78. 8 87. 3 109. 6	106. 5 114. 0 94. 1 105. 1 104. 7 113. 7 231. 3 94. 0 72. 2 79. 1 87. 3 101. 4	105. 0 113. 5 92. 3 102. 4 104. 7 113. 3 231. 8 90. 0 73. 0 79. 1 87. 3 96. 8	106. 8 113. 3 56. 3 101. 7 104. 5 113. 1 229. 6 99. 7 71. 8 76. 4 87. 2 101. 3	105, 9 113, 2 94, 3 108, 0 108, 3 112, 6 229, 6 108, 5 72, 1 76, 5 84, 4 102, 9	105. 3 112. 6 92. 8 106. 1 103. 0 112. 8 269. 1 95. 3 67. 9 73. 1 83. 2 106. 5	96, 8 96, 8 102, 4 98, 0 94, 7 136, 9 63, 9 67, 9 67, 4 70, 2 106, 6
All commodities other than farm and foods	115.6	*115.7	115. 2	114.0	114.8	114.5	114. 4	114. 4	114.3	114.2	114. 5	114. 5	114.2	162, 2
Textile products and apparel. Cotton products. Wool products. Synthetic saxtles elik products. A pparel. Other textile products.	95. 3 90. 8 106. 1 87. 6 121. 1 98. 2 76. 6	*96. 2 *90. 6 *106. 3 86. 7 122. 4 *98. 2 78. 0	96, 2 90, 2 106, 6 87, 3 124, 1 98, 2 77, 3	95. 2 89. 9 106. 7 87. 2 123. 9 98. 4 76. 9	95, 2 89, 9 106, 6 86, 9 127, 4 98, 4 77, 6	98.4 89.9 108.4 86.1 127.0 98.6 80.9	95. 3 99. 2 109. 6 85. 8 128. 4 98. 6 80. 3	95. 3 89. 1 110. 3 85. 7 126. 3 96. 6 79. 8	96. 1 88. 9 109. 8 85. 7 124. 2 98. 4 79. 1	94. 9 88. 4 110. 1 86. 6 123. 9 96. 1 79. 0	94. 8 88. 3 109. 5 85. 2 131. 6 98. 2 78. 8	94. 7 88. 8 109. 2 84. 6 132. 8 98. 2 78. 9	95. 0 86. 5 100. 3 84. 9 135. 1 96. 6 80. 6	93, 8 90, 6 105, 8 91, 3 88, 9 92, 7 94, 3
Hides, skins, and leather products. Hides and skins Leather Footwear Other leather products.	92. 2 50. 7 82. 1 111. 5 96. 0	92, 3 81, 6 82, 2 111, 5 95, 8	91. 9 49. 5 81. 2 111. 6 95. 8	91. 8 47. 4 81. 5 111. 6 95. 9	92.8 52.7 82.0 111.7 96.0	92.4 49.5 82.1 111.8 96.1	93. 6 51. 5 82. 9 111. 8 96. 5	94. 0 56. 8 54. 4 111. 8 96. 7	94. 9 58. 2 96. 5 111. 8 97. 0	95. 6 60. 6 87. 4 111. 9 97. 5	96. 0 62. 5 87. 6 111. 9 97. 5	94. 6 55. 5 55. 0 111. 9 97. 4	94. 7 56. 0 86. 3 111. 9 97. 6	99, 1 94, 3 98, 2 102, 7 95, 2
Fuel, power, and lighting materials Coal. Coke. Gas Electricity Petrologum and products.	108. 7 105. 1 132. 4 116. 3 100. 1 111. 7	°108. 7 *105. 2 132. 4 *116. 3 *100. 1 111. 7	106. 5 105. 2 132. 4 113. 0 100. 7 111. 7	107. 8 108. 2 132. 4 110. 2 100. 7 110. 4	107. 4 105. 1 132. 4 107. 3 103. 0 109. 5	106, 9 105, 1 132, 4 105, 8 101, 8 100, 3	106.9 105.5 132.4 105.0 101.2 100.4	106. 9 105. 2 132. 4 105. 4 102. 4 109. 3	106. 2 104. 9 132. 4 106. 4 101. 8 108. 2	107. 8 104. 7 132. 4 107. 8 101. 8 110. 9	108. 3 104. 5 132. 4 109. 0 101. 8 111. 7	108.6 104.1 132.4 112.3 101.8 112.1	109. 2 107. 9 132. 5 111. 5 102. 9 111. 8	102, 4 104, 8 115, 6 94, 8 101, 3 103, 1
Chemicals and alited products Industrial chemicals Prepared paint Paint materials Druss and pharmaceuticals Fats and oils, inexible Mixed fertilizer Fettilizer materials Other chemicals and products 4	106. 9 117. 5 114. 0 96. 9 93. 1 55. 2 108. 9 113. 6 107. 9	*107. 1 117. 4 118. 1 96. 1 *93. 3 61. 0 *109. 0 113. 5 108. 0	107. 1 117. 3 112. 8 95. 8 93. 6 61. 8 106. 8 113. 6 107. 7	107. 0 117. 4 112. 8 96. 2 93. 6 59. 3 106. 9 113. 3 107. 9	107. 0 117. 7 112. 8 96. 6 93. 6 57. 8 109. 1 112. 2 107. 6	106. 9 117. 6 112. 8 97. 2 93. 6 56. 5 109. 2 112. 1 167. 6	106.8 117.4 112.8 97.0 94.0 84.0 100.3 112.3 107.6	106. 8 117. 4 112. 6 97. 8 94. 0 53. 5 109. 8 112. 1 107. 6	106. 7 117. 1 112. 8 97. 6 94. 0 82. 0 100. 7 112. 1 107. 9	106. 8 117. 0 112. 8 96. 8 94. 0 85. 7 106. 9 111. 6 107. 7	107. 1 117. 3 112. 8 95. 3 94. 0 89. 3 100. 9 114. 0 108. 1	107. 2 117. 4 112. 8 94. 7 94. 0 59. 8 109. 9 114. 1 108. 1	107. 4 117. 0 112. 8 95. 2 93. 9 60. 5 110. 0 114. 0 109. 1	92.1 95.3 98.0 86.8 91.3 48.8 101.2 98.5 191.1
Rubber and products Crude rubber The easings and tubes Other rubber products	142.8	*140.6 151.3 *142.4 *132.0	136. 8 146. 0 139. 9 127. 9	132, 9 137, 6 134, 9 125, 2	131. 4 134. 1 134. 9 125. 4	128. 5 132. 0 129. 6 125. 2	126. 9 125. 6 129. 6 124. 0	126. 4. 123. 5 129. 6 123. 7	126. 8 126. 5 129. 3 123. 7	126. 1 122. 8 129. 8 128. 7	128. 1 117. 5 129. 3 123. 7	125. 0 117. 0 129. 3 123. 7	124.9 113.8 130.8 123.7	109 6 129 0 108 1 108 6
Lumber and wood products	121. 6 128. 7	*121. 2 *121. 4 120. 0 *104. 8	120. 3 120. 0 130. 4 104. 7	120. 0 119. 8 130. 3 104. 3	119.9 119.6 130.2 104.3	119, 8 119, 5 130, 2 104, 3	119.3 119.0 130.2 103.2	119. 1 118. 7 129. 7 105. 4	119. 1 118. 6 130. 7 103. 0	116.3 116.6 139.8 99.7	115. 0 130. 8	116. 2 115. 3 130. 8 100. 7	116.7 118.6 131.1 102.0	112, 4 113, 8 110, 9 101, 7
Pulp, paper, and allied products. Woodpulp. Wastepaper Paper Paper Paperboard. Converted paper and paperboard. Building paper and board.	116.8 110.0 89.4 128.0 125.7 111.5 129.7	116. 6 110. 0 90. 2 128. 0 124. 0 111. 5 129. 4	116. 3 110. 0 90. 2 127. 5 124. 0 111. 1 127. 6	124. 1 111. 0	116. 0 109. 6 87. 3 126. 5 124. 1 111. 3 127. 6	116. 3 109. 6 83. 8 126. 5 124. 2 111. 9 127. 6	109. 6 80. 0 126. 5 124. 2 112. 0	100. 6 80. 0 126. 5 124. 2 112. 0	116. 2 109. 6 79. 2 126. 5 124. 2 111. 9 127. 9	109, 7 70, 1 126, 5 124, 2 111, 5	109. 7 67. 2 126. 5 124. 4 111. 5	116. 3 109. 7 83. 2 126. 8 124. 8 111. 8 127. 9	116.6 109.7 84.1 126.8 124.6 112.3 127.9	95, 9 90, 6 79, 6 103, 3 97, 2 93, 2 106, 3
fetals and metal products. Iron and steel. Nonferrous metals. Metal containers Hardware Plumbing equipment Heating equipment Structural metal products. Nonstructural metal products.	131. 9 136. 2 134. 3 131. 6 144. 1 123. 0 113. 6 117. 9 128. 9	113.7 *118.0	117.8	127.6 131.6 142.3 118.7 114.3 117.8		129. 7 135. 0 127. 4 131. 2 141. 6 118. 7 114. 3 117. 9 126. 0	134. 1 126. 2 131. 2 140. 9 118. 5 114. 1 118. 0	133. 8 125. 1 131. 2 138. 9 116. 5 114. 1 117. 7	138, 2 118, 5 114, 0 115, 9	131. 8 123. 7 130. 0 137. 9 116. 5 113. 8 115. 9	131, 8 123, 6 130, 0 137, 9 118, 2 113, 9 116, 5	114. 5 116. 6	126. 3 130. 6 121. 2 130. 0 136. 0 116. 2 114. 4 116. 8 126. 3	106, 9 113, 1 101, 8 109, 0 111, 1 163, 2 102, 0 100, 1 113, 3

See footnotes at end of table.

TABLE D-9: Indexes of wholesale prices, by group and subgroup of commodities '-Continued [1947-49-100]

Commodity group	Mar. 1955 ³	Feb. 1955	Jan. 1955	Dec. 1954	Nov. 1984	Oet. 1984	Bept. 1984	Aug. 1954	July 1984	June 1984	May 1954	Apr. 1954	Mar. 1984	June 1980
Machinery and motive products	126.2		125. 8	125.7	125. 3	124. 3	124. 4	124. 8	124. 8	124.3	124.4	124. 6	124. 5	106.
Agricultural machinery and equipment	121. 6		121. 5	121. 2	121. 3	122.0	121.9	122. 1	122. 3	122.3	122.6	122.3	122.3	108.
Construction machinery and equipment	133. 9		183. 2	132.6	131. 6	131.6	131.6	131. 5	131. 5	131. 5	131. 8	131.6	131.7 133.0	108.
Metalworking machinery and equipment	130. 8	*136.6	135. 1	134.7	134.0	134.0	133.3	132.7	132.6 127.8	128. 2	138. 2	128.2	128. 6	107
General purpose machinery and equipment	126.6		126.4	126.0	126.0	126.1	125. 0	125.6	125. 8	125. 5	125. 2	125. 2	125.1	105
Miscellaneous machinery Electrical machinery and equipment	126. 7	*126. 7	126.8	126.8	126.7	125. 2	125.6	126.7	125.8	125.9	126.0	126. 6	126.8	100.
Motor vehicles			121.7	121.7	121.0	118.6	118.9	118.9	118.9	118.9	118.9	118.9	118.9	106.
PLOSOF VEHICLES	101.0	121.0	1.41. /	141. /	141.0	110.0	110.0	ALIE. D	140.0	*****	110.0		***	200.
furniture and other household durables	115.1	115.4	115. 5	115.7	115.6	115, 6	115.3	115. 3	118.3	115. 4	115. 8	118.6	115.0	103.
Household furniture	112.7	*112.6	112.5	112.9	112.9	112.8	112.8	112.9	112.8	113. 1	113. 8	113.6	113.7	101.
Commercial furniture	128.6		128.6	128. 6	128.6	127.3	126. 2	126. 2	126. 2	126. 2	126, 2	126. 2	126. 2	106.
Floor covering	124. 4	124. 4	124. 2	124.0	124.0	124.0	124. 4	123. 5	122.7	122.6	122.6	122.6	122.6	109.
Household appliances	107.3		108.7	109. 4	109.1	100. 8	109.4	109.7	109.7	109.8	100.0	109. 9	109. 8	100.
Television and radio receivers		*93. 2	93. 5	(9)	(9)	(9)	(*)	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Other household durable goods	132.0	132.0	131. 9	131. 5	131. 5	131. 3	130. 5	130.4	130. 4	130. 4	130. 4	130, 4	128. 2	108.
onmetallie minerale—structural	121.9	*121.8	122.0	121.8	121.8	121.9	121.7	120.5	120.4	119.1	119.3	120.8	121.0	108.
Flat glass			123.9	123.9	123.9	123.9	123.9	124.7	124.7	124.7	124.7	124.7	124.7	108
Concrete ingredients		*123.9	123.1	122.3	122.1	122.1	122 1	122. 2	122.1	120.1	126.0	119.8	119.9	105.
Concrete products	118.2		116.7	117.4	117. 4	117.8	117.8	117. 9	117. 7	117. 8	117.3	117.3	117.3	104.
Structural clay products	136.3	136.1	135.8	135.4	135.4	135.4	135.4	132.3	132.0	132.0	132.0	132.0	132.0	110.
Oypsum products	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122. 1	122 1	122.1	102.
Prepared asphalt roofing	99. 1	*100.4	106.1	106. 1	106.1	106.1	104. 1	98. 6	98. 8	94. 2	96.3	108.4	109.9	96.
Other nonmetallic minerals	119. 2	119. 2	119. 2	119. 5	119. 5	120.8	120.8	120.8	120. 2	120. 2	120, 2	120. 2	110.8	105.
obacco manufactures and bottled beverages	121.6	121.6	121.4	121.4	121.4	121.5	121.8	121. 8	121.4	121.4	121.4	121.5	117.9	101.
Cigarettes.	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	124.0	102
Cigare	103.7	103. 7	103.7	103. 7	103. 7	108.7	108.7	103.7	103. 7	103. 5	108. 5	103. 5	103. 8	100.
Other tobacco products	121. 4	121. 4	121. 4	121. 4	121. 4	121.4	121.4	121. 4	121. 4	120.7	120.7	120.7	120.7	100.
Alcoholic beverages	114.7	114.6	114.3	114.3	114.3	114.3	114.3	114.8	114.2	114.2	114.8	114.6	114.6	100.
Nonnicoholic beverages	148. 1	148.1	148.1	148.1	148.1	148.1	148. 1	148.1	145. 1	148.1	147. 9	147.9	125.1	100.
														-
fiscellaneous	95. 6	*97.1	97.0	98. 0	97.0	96. 7	99.1	102.3	103. 9	105.1	109. 2	110.3	104. 9	104
Toys, sporting goods, smell arms		*113.1	113. 2	112.9	112.8	112.7	112.7	113. 4	113. 5	113.6	113.6	113.6	113.0	98.
Manufactured animal feeds	83.1	85. 8	84. 9	86. 8	85.0	94. 3	89. 0	96. 2		100 6	109.1	111.1	98. A	98.
Notions and accessories	92.3	*92.3	101.3	101. 2	101. 2	101. 2	101. 2	101.6	101.6	101. 6	102.3	102.7	102.0	00.
Jewelry, watches, photo equipment		200 m		121.0	120. 9	120.8	121. 2	102.8	131. 2	121. 8	121.3	121. 3	121. 2	106
Other miscellaneous	120.6	120.6	120.3	121.0	120.9	120.8	121. 2	121. 2	131. 2	545. 6	131.4	141. 4	241. 2	\$100h

¹The revised wholesale price index (1947-49=160) is the official index for January 1952 and subsequent months. The official index for December 1951 and previous dates is the former index (1956-166). The revised index has been computed back to January 1947 for purposes of comparison and analysis. Prices are collected from manufacturers and other producers. In some cases they are secured from trade publications or from other Government agencies which collect price quotations in the course of their regular work. For a more detailed description of the index, see A Description of the Revised Wholesale Price Index, Monthly Labor Review, February 1952 (p. 186), or reprint Serial No. R. 2067.

Beginning with the final wholesale price index for January 1988, the index weights are based on an average of the dollar value of primary market transactions in calender years 1962 and 1963. Previously, the weights were based on the dollar value of transactions in 1947. The weight revision does not affect the comparability of the indexes.

1 Preliminary.

2 Not available.

4 Cosmetics and related products moved from drugs and pharmaceuticals subgroup to other chemicals and products subgroup to other chemicals and products subgroup.

TABLE D-10: Special wholesale price indexes'

(1947-49-100)

		1955		1954										
Commodity group	Mar.	Feb.	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	June
All foods All foods All fish Special metals and metal products Metalworking machinery Machinery and equipment Total tractors Steel mill products Building materials Soaps synthetic detergents Refined pertoleum products	129. 1 143. 0 128. 7 122. 4 145. 8 122. 8 98. 3 98. 4 110. 1	*128.9 *142.7 *128.6 *122.4 145.8 122.5 *98.9 93.4 109.9	101. 9 108. 7 128. 0 140. 7 128. 1 122. 2 145. 7 123. 1 97. 4 93. 4 109. 9	101. 0 100. 5 127. 7 140. 1 127. 9 121. 9 145. 8 122. 0 96. 9 93. 4 108. 4	102. 7 102. 8 127. 6 140. 1 127. 7 122. 0 145. 8 121. 9 195. 4	102. 4 101. 8 127. 1 140. 2 127. 4 123. 2 145. 8 121. 7 96. 1 93. 4	103. 7 113. 9 126. 6 140. 2 127. 4 123. 2 145. 7 121. 3 96. 1 93. 4 107. 3	105. 5 111. 1 126. 3 140. 2 127. 2 123. 2 145. 6 120. 8 96. 0 96. 4 167. 2	105. 6 103. 5 125. 8 139. 9 127. 2 121. 9 145. 6 120. 5 96. 6 93. 4	102. 7 97. 4 125. 2 139. 9 127. 3 123. 9 141. 9 118. 5 96. 3 96. 4	104. 6 100. 7 125. 2 130. 9 127. 4 123. 9 141. 0 118. 6 97. 1 93. 4 110. 0	103. 9 105. 7 125. 0 139. 9 127. 5 123. 9 141. 9 119. 0 97. 1 93. 4 110. 5	103.0 107.5 124.6 140.1 127.6 123.7 141.9 119.3 97.1 93.4	95. 92. 108. 109. 106. 107. 114. 107. 80. 82.
East coast petroleum Mid-continent petroleum Gulf coast petroleum Pulp, paper and products, ezci. bidg. paper Bitumbrous coal, domestic siese. Lumber and wood products, ezci. millwork All commodities except farm products.	106, 1 107, 5 118, 5 105, 4	105, 5 107, 5 118, 5 105, 4 116, 4 *112, 1 *120, 1 113, 4	105. 3 107. 5 117. 9 106. 9 116. 0 112. 2 118. 9 113. 2	105. 3 105. 5 116. 9 103. 1 115. 7 112. 2 118. 6 112. 9	102. 9 105. 2 115. 9 102. 6 115. 8 112. 3 118. 4 112. 8	102. 9 104. 6 115. 9 102. 6 116. 0 112. 1 118. 4 112. 5	101. 1 104. 0 114. 9 108. 8 116. 0 110. 8 117. 8 112. 8	101. 1 103. 7 114. 9 108. 8 116. 0 108. 5 117. 6 113. 0	104. 7 102. 8 109. 9 108. 8 115. 9 166. 7 117. 4 112. 9	106. 1 104. 8 113. 1 115. 9 115. 5 104. 2 114. 8 112. 6	107. 8 105. 4 113. 1 118. 8 115. 5 108. 6 114. 0 113. 1	108. 1 105. 7 114. 1 118. 8 116. 1 108. 7 114. 1 112. 9	106. 7 106. 8 110. 0 118. 8 114. 3 106. 3 114. 7 112. 6	98. 101. 100. 94. 95. 106. 112. 101.

See footnote 1, table D-9.

² Preliminary.

^{*} Revised.

E: Work Stoppages

TABLE E-1: Work stoppages resulting from labor-management disputes 1

	Number	of stoppages	Workers involve	red in stoppages		during menth
Month and year	Beginning in month or year	In effect dur- ing month	Beginning in month or year	In effect dur- ing month	Number	Percent of esti- mated work- ing time
1935-90 (average)	2, 842		L 130, 000		16, 900, 000	6.2
1947-49 (average)	3, 573	*************	2, 380, 000		39, 700, 000	. 0
1915	4, 750		3, 476, 000		38, 000, 000	.4
1916	4, 965	************	4, 600, 000		116, 000, 000	1.41 .41
1947	1,668		2, 170, 000		34, 600, 000	.4
	8, 419	************	1, 960, 000	***************************************	34, 100, 000	. 31
1040	3, 606	************	3, 000, 000		80, 500, 000	. 56
19.00	4, 848	*************	2, 410, 000		38, 800, 000	. 44
MI	4, 787	*************	2, 220, 000	*************	22, 900, 000	. 21
1000	£ 117		3, 540, 000	************	89, 100, 000	. 87
1949	6,091		2, 400, 000	***********	28, 300, 000	. 94
1864	3, 468	*******	1, 800, 000	**********	22, 600, 000	. 51 . 44 . 91 . 67 . 91
1984: January	206	341	71,000	127, 000	1, 620, 660	. 12
February	249	400	59,000	104,000	886, 000	. 11
March	208	420	113, 000	100,000	1, 490, 000	. 16
April	330	801	113,000	187,000	1, 220, 000	.11
May	364	889	206,000	244, 000	2, 010, 000	. 24
June	356	677	196, 000	281,000	2, 390, 000	. 26
July	370	580	228, 000	376,000	3, 800, 000	. 44
August	328	825	143, 000	300,000	3, 740, 000	. 41
September	315	526	126,000	304, 000	2, 410, 000	. 27
October	285	488	164, 000	219,000	1, 820, 000	. 24 . 44 . 41 . 27 . 21
November	220 153	367	71,000	129,000	1, 310, 000	. 15
December	153	298	29,000	78, 000	486,000	.00
955: January 1	225	325	50,000	80,000	400,000	.00
February 1	250	380	90,000	125,000	570,000	. 67
March 1	300	450	165, 000	220, 000	1, 600, 000	. 17

¹ All work stoppages known to the Bureau of Labor Statisties and its various cooperative agencies, involving six or more workers and lasting a full day or shift or longer, are included in this report. Figures on "workers involved" and "man-days idle" cover all workers made idle for as long as one

shift in establishments directly involved in a stoppage. They do not measure the indirect or secondary effects on other establishments or industries whose employees are made idle as a result of material or service shortages.

Preliminary.

F: Building and Construction

TABLE F-1: Expenditures for new construction 1

[Value of work put in place]

							Expe	endicure	(in mi	llions)					
Type of construction		1	965						1	954				1954	1968
	Apr.	Mar.	Feb.	Jan.	Dec.	Nov.	Oet.	Bept.	Aug.	July	June	May	Apr.	Total	Total
Total new construction 4	\$3, 225	82, 984	\$2, 644	\$2, 787	\$2, 965	\$3, 255	\$3, 479	83, 514	83, 637	83, 822	83, 364	83, 114	82, 813	837, 176	536, 250
Private construction Residential building (nonfarm) New dwelling units Additions and alterations Nonhousekeeping Nonresidential building (nonfarm) Industrial Commercial	1, 294 1, 175 96	2, 173 1, 167 1, 070 76 21 589 186 208	1, 966 1, 034 960 63 21 548 187 198	2,061 1,111 1,020 70 21 541 185 188	2, 202 1, 214 1, 115 77 22 834 173 186	2, 347 1, 292 1, 175 95 22 551 189 200	2, 410 1, 321 1, 195 102 24 541 163 197	2, 457 1, 326 1, 195 106 25 551 160 207	2, 459 1, 313 1, 175 110 28 582 160 207	2, 392 1, 267 1, 125 113 29 849 161 263	2, 278 1, 193 1, 050 114 29 828 164 189	2, 122 1, 107 970 111 26 490 165 167	1, 927 980 860 98 34 464 169 181	25, 720 13, 450 12, 035 1, 119 256 6, 180 2, 011 2, 182	23, 877 11, 908 10, 884 1, 106 267 4, 686 2, 230 1, 701
Warehouses, office, and loft buildings. Stores, restaurants, and garages. Other nonresidential building. Religious. Educational. Social and recreational. Hospital and institutional'. Miscellaneous. Farm construction. Public utilities. Railroad. Telephone and telegraph. Other public utilities. All other privata'. Public construction Residential building tother than	350 29 52 269	82 126 165 83 41 17 28 26 105 328 27 82 249 41 761 21	83 116 163 53 39 117 28 26 97 294 47 20 47 227 13 688 21	85 103 168 85 42 18 28 25 93 302 22 47 203 14 726 23	88 98 176 57 51 15 28 25 93 349 29 49 27 11 27 83 22	94 196 182 89 53 17 29 24 106 386 38 53 29 12 938 23	80 108 181 58 54 18 29 22 120 410 85 87 318 12 1,060 25	89 118 194 87 84 19 29 25 163 34 86 328 12 1, 157 26	88 119 185 55 53 20 29 28 167 415 33 56 396 12 1, 178 26	81 122 188 51 61 20 29 34 164 400 51 56 31 42 1, 130 25	76 113 178 46 47 20 28 34 187 39 54 30 11 1,066	72 95 158 42 43 17 28 28 146 871 54 286 9 902 31	89 82 144 40 39 16 27 22 127 348 33 80 263 886 34	964 1, 218 1, 996 598 599 210 235 303 1, 560 4, 400 378 625 3, 400 111, 450 345	736 1, 052 1, 660 472 426 103 317 292 1, 731 4, 442 615 8, 380 11,370 806
Nonrespondata foliating other than military facilities. Industrial Educational Hospital and institutional Other nonresidential Military facilities statement of the military facilities statement of	363 86 196 25 57 87 245 88	340 79 185 25 81 83 165 82	304 68 170 23 43 78 125 70	330 88 175 24 43 82 145 77	339 100 174 24 41 83 185 77	358 103 179 27 49 90 300 84	378 105 184 30 89 96 390 87	403 109 189 32 73 96 445 91	423 130 187 35 71 93 440 94	409 130 181 33 65 89 415 88	397 130 176 34 57 89 385 84	387 182 172 83 80 78 820 80	377 138 165 30 44 79 230 78	4, 835 1, 500 2, 065 350 620 1, 010 3, 525 975	4, 362 1, 771 1, 728 363 800 1, 307 3, 168 861
prises ii. Conservation and development	15 52 15	12 46 12	10 40 10	12 47 10	12 85 10	14 50 10	19 62 12	20 43 13	22 65 15	22 67 15	20 68 15	17 64 15	15 60 13	200 710 150	201 830 107

I Joint estimates of the Bureau of Labor Statistics, U. S. Department of Labor, and the Business and Defense Services Administration, U. S. Department of Commerce. Estimated construction expenditures represent the monetary value of the volume of work accomplished during the given period of time. These figures should be differentiated from permit valuation data reported in the tabulations for building permit scrivity (tables F-3, F-4, and F-5) and the data on value of contract awards reported in table F-2.

9 Preliminary.

1 Revised.

1 Includes major additions and alterations.

2 Includes bates, dormitories, and tourist courts and cabins.

2 Expenditures by privately owned public utilities for nonresidentia building are included under "Public atilities."

^{&#}x27;Includes Federal contributions toward construction of private nonprofit hospital facilities under the National Hospital Program.

'Covers privately owned sever and water facilities, roads and bridges, and miscellaneous nonbuilding items such as parks and playgrounds.' Includes nonhousekeeping public residential construction as well as housekeeping units.

'Covers all construction, building as well as nonbuilding (except fur production facilities, which are included in public industrial building).

'I Covers primarily publicly owned airports, electric light and power systems, and local transit facilities.

'D Covers public construction not elsewhere classified such as parks, playgrounds, and memorials.

TABLE F-2.—Contract awards: Public construction, by ownership and type of construction1

						1	/alue (in	millions)					
Ownership and type of construction	1955						19	54						Totals
	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Apr.	Mar.	Feb.	Jun.	1954
All public construction	\$520.9	\$764. 2	\$569. 8	\$722.4	\$726.1	\$637.7	8746. 5	\$915.0	\$740. 2	\$786.1	\$564. 3	8446.7	\$502.1	\$8, 121.
Redeally owned. Residential building. Rouresidential building. Educational. Hospital and institutional. Administrative and general. Other moresidential building. Industrial. Troop bousing. Warehouses. Airfields. Conservation and development. Highway. Electric power utilities. All other federally owned.	44.6 (*) 6.8 3.6 34.2 34.8 6.8 3.7	87. 2 0 33. 4 1. 4 1. 4 31. 5 9. 5 9. 5 10. 9 3. 2 2. 3 5. 6 6. 5 9 19. 2 6. 7 18. 6 6. 6	92.8 (2) 9 (3) 62.9 (4) 16.5 4.1 42.3 7.7 29.0 9 4 4.3 7.0 16.0 2.8 1.4 2.7	136. 4 0 81. 6 3. 1 8. 1 1 2. 5 67. 9 6. 4 22. 1 29. 8 3. 0 6. 6 11. 9 32. 2 6. 0 3. 6 11. 9	109. 1 .3 .55. 9 1. 3 4. 2 4. 7 45. 7 1. 7 23. 5 8. 5 1. 6 10. 4 14. 1 23. 8 6. 4 6. 0 3. 6	73. 7 (*) 42. 8 . 2 9 37. 9 37. 9 3. 2 3. 4 10. 2 7. 4 6. 3 1. 8	90. 5 0 66. 1 1. 2 5 3. 3 61. 1 3. 6 19. 6 8 25. 1 12. 0 12. 5 6. 6 7. 2 7	188. 0 2 119. 6 4 15. 3 7. 6 96. 3 13. 4 44. 1 6. 0 7. 1 25. 7 14. 3 29. 9 8. 6 6. 2 9. 2	117. 2 (*) 70. 6 1. 6 13. 6 2. 3 53. 1 5. 6 1. 25 6. 1 12. 5 16. 5 16. 9 2. 2 3 9. 4	258. 1 2. 4 198. 9 . 1 1. 4 3. 0 194. 4 17. 2 142. 8 2. 9 24. 4 7. 1 20. 3 23. 3 4. 6 4. 6 4. 0	84. 3 41. 4 . 3 4. 2 8. 1 10. 4 11. 3 . 9 6. 8 8. 3 12. 4 6. 6 6. 9 8. 2	62.7 4 16.9 6.3 1.7 8.7 1.4 3.5 1.3 .5 1.3 7.3 1.4 3.8	101. 1 73. 7 6. 1 64. 9 12. 3 42. 3 2. 5 2. 6 8. 9 11. 6 4. 7 2. 4 8. 6 8. 0	1, 407. 3, 803. 14. 72. 38. 737. 89. 390. 68. 52. 106. 152. 199. 62. 66. 57.
Residential building. Residential building. Residential building. Educational Hospital and institutional Administrative and general Other nonresidential building. Highway Sewerage systems. Water supply facilities. Utilities. Electric power. Other utilities. All other buildingly owned.	439. 1 7. 9 224. 3 132. 1 20. 3 28. 0 43. 9 121. 4 35. 8 27. 6 12. 7 4. 3 8. 4 9. 4	677. 0 10. 0 274. 0 185. 0 22. 0 26. 0 41. 0 281. 0 29. 0 48. 0 20. 0 10. 0 15. 0	477. 0 9. 0 204. 0 146. 0 14. 0 28. 0 19. 0 180. 0 41. 0 26. 0 10. 0 4. 0 6. 0 7. 0	586, 0 10, 0 226, 0 164, 0 21, 0 28, 0 243, 0 55, 0 29, 0 7, 0 3, 0 4, 0 16, 0	617. 0 28. 0 256. 0 181. 0 17. 0 28. 0 20. 0 244. 0 36. 0 25. 0 9. 0 6. 0 19. 0	864. 0 16. 0 236. 0 179. 0 12. 0 18. 0 27. 0 225. 0 35. 0 24. 0 15. 0 10. 0 5. 0 13. 0	650. 0 34. 0 251. 0 193. 0 18. 0 28. 0 208. 0 35. 0 23. 0 6. 0 6. 0 27. 0	727. 0 49. 0 247. 0 186. 0 20. 0 18. 0 23. 0 338. 0 42. 0 22. 0 19. 0 5. 0 14. 0 10. 0	623. 0 22. 0 265. 0 170. 0 18. 0 7. 0 70. 0 228. 0 50. 0 32. 0 9. 0 4. 0 19. 0	528. 0 13. 0 202. 0 162. 0 17. 0 23. 0 224. 0 46. 0 25. 0 6. 0 4. 0 2. 0 12. 0	480. 0 20. 0 210. 0 157. 0 9. 0 31. 0 171. 0 28. 0 17. 0 15. 0 8. 0 7. 0 9. 0	384. 0 13. 0 186. 0 135. 0 28. 0 9. 0 14. 0 17. 0 15. 6 6. 0 2. 0 4. 0 3. 0	401. 0 9. 0 154. 0 108. 0 14. 0 16. 0 16. 0 169. 0 38. 0 17. 0 9. 0 2. 0 7. 0 5. 0	6, 714. 6 233. 0 2, 711. 0 1, 956. 0 214. 0 191. 0 350. 0 2, 713. 0 462. 0 303. 0 137. 0 62. 0 75. 0

¹ Prepared jointly by the Bureau of Labor Statistics, U. S. Department of Labor, and the Business and Defense Services Administration, U. S. Department of Commerce. Includes major force account projects started principally by TVA and State highway departments.

category.
Less than \$50,000,

Note.—The series on contracts awarded for public construction (table F–2) is being revised and data for February 1954 are not available. In the June issue of the Review, table F–2 will present revised statistics for March 1954 through March 1955 and annual totals for 1953–54.

¹ Types not shown separately are included in the appropriate "other"

TABLE F-3: Building permit activity: Valuation, by private-public ownership, class of construction, and type of building¹

					Valuation	(in million	a)			
Class of construction, ownership, and type of building	19	65				19	64			
	Feb.	Jan.	Dec.	Nov.	Oct.	flept.	Aug.	July	June	Annual total
All building construction Private. Public.	1, 100.0	\$1, 124. 2 1, 038. 6 85. 6	\$1, 226. 7 1, 008. 6 128. 1	\$1, 345. 2 1, 225. 9 119. 3	\$1, 471. 5 1, 349. 3 122. 1	\$1, 446. 6 1, 318. 0 128. 5	\$1, 539. 3 1, 387. 8 151. 5	\$1, 819. 2 1, 396. 0 123. 2	\$1, 649. 1 1, 459. 9 189. 2	\$16, 464. 14, 806. 1, 658.
New residential building. New dwelling units (housekeeping only). Privately owned. 1-family 2-family 3- and 4-family. 5-or more family. Publicly owned. Nonhousekeeping buildings. New nonresidential buildings. Commercial pusitings. A musement buildings. Commercial parages Gasoline and service stations. Office buildings. Stores and other mercantile buildings. Educational buildings. Educational buildings. Religious buildings. Religious buildings. Religious buildings. Religious buildings. Rustratial buildings. Public buildings. Public utilities buildings. Public utilities buildings.	742.5 727.3 14.9 6.5 28.0 19.3 363.1 122.2 12.6 2.7 8.5 31.0 67.5 129.2 22.0 22.0 5.5 49.7 16.7	711. 5 702. 6 699. 9 647. 9 12. 8 6. 2 33. 0 2. 7 8. 0 317. 9 306. 8 6. 2 5. 0 8. 8 74. 9 21. 7 22. 2 5. 7 44. 7 16. 6 13. 2 12. 1	742.6 729.4 718.1 665.5 16.1 7.6 28.9 111.3 138.9 9 143.1 70.3 4 4 70.3 139.1 96.7 2 2.2 2.2 2.8 8.0 9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	838. 2-830. 1 827. 2-767. 4 17. 3 6. 8 35. 7 2. 8 8 1 3 88. 3 341. 2 5. 0 6. 0 4. 3 10. 8 41. 8 79. 4 139. 0 80. 6 29. 8 13. 0 42. 1 42. 1 43. 2 44. 2 45. 2 46. 2 47. 2	894. 1 881. 6 879. 4 816. 5 16. 9 9 2 37. 0 12. 5 457. 0 124. 5 8. 3 7. 8 10. 6 25. 8 82. 1 11. 155. 8 96. 7 18. 7 18. 7 18. 7 18. 7 18. 7 18. 7 18. 7 18. 9 19. 2 19. 2 19. 2 19. 2 19. 3 19. 4 19. 4 19. 5 19. 7 19. 7	912.6 908.0 892.0 837.0 127.4 4.8 30.8 13.0 7.0 408.0 37.1 11.0 37.1 11.0 37.1 12.3 80.1 13.4 4 8.5 11.0 11.0 11.0 11.0 11.0 11.0 11.0 11	928. 8 920. 6 900. 4 847. 5 18. 2 6. 3 34. 4 14. 2 770. 1 143. 3 9. 6 6 3. 3 12. 2 41. 8 70. 7 166. 1 106. 2 5 33. 8 18. 2 4 18. 2 4 18. 3 18. 2 4 18. 3 18. 2 4 18. 3 18. 3 1	923. 7 908. 3 802. 4 824. 5 19. 7 6. 3 41. 9 115. 4 455. 6 180. 0 7. 2 6. 4 11. 0 90. 6 73. 8 162. 9 109. 3 20. 4 33. 2 17. 6 47. 3 13. 9 14. 9 17. 3 18. 9 18. 9 19. 3	1,008.4 961.0 890.8 19.1 10.9 44.2 33.5 8.9 488.7 130.8 15.2 2 3.1 11.3 280.0 9103.6 61.0 39.3 17.3 87.5 90.0 91.4	9, 990. 9, 854. 9, 605, 8, 918. 210. 210. 217. 478. 1, 159. 1, 871. 481. 1, 871. 1, 871. 1, 871. 233. 261. 360. 360. 360. 360. 360. 360. 360. 360

¹ These statistics on building construction authorized by local building permits measure building activity in all localities having building-permit systems—rural nonfarm as well as urban. Such localities (over 7,000) inseliude about 80 percent of the nonfarm population of the country, according to the 1930 Census. The data cover both federally and nonfederally owned projects. Figures on the amount of construction contracts awarded for Federal projects and for public housing (Federal, State, and local) in permitsusing places are added to the valuation data (estimated cost entered by builders on building-permit applications) for privately owned projects:

construction undertaken by State and local governments is reported by local officials. No adjustment has been made in the building-permit data to reflect the fact that permit valuations generally understate the actual cost of construction, no for lapsed permits or the lag between permit issuance or contract-award dates and start of construction. Therefore, they should not be considered as representing the volume of building construction started. Components may not always equal totals because of rounding.

1 Preliminary
1 Revised.

Table F-4: Building permit activity: Valuation, by class of construction and geographic region 1

				1	Valuation (in millions)			
Class of construction and geographic region	10	958				195				
	Feb.	Jan.*	Dec.4	Nov.	Oct.	Sept.	Aug.	July	June	Annuai total
All building construction • Northeast North Central South West	\$1, 220. 2 218. 9 312. 8 378. 1 310. 3	\$1, 124. 2 247. 5 238. 6 341. 1 296. 9	\$1, 226. 7 256. 3 326. 4 320. 1 323. 9	\$1, 345. 2 287. 4 365. 8 339. 7 232. 4	\$1, 471. 5 298. 2 435. 2 386. 2 351. 9	\$1, 446. 6 268. 2 431. 0 289. 9 237. 5	\$1, 539. 3 361. 1 490. 0 354. 3 344. 0	\$1, 519. 2 369. 0 465. 5 346. 6 335. 0	\$1, 649. 1 346. 4 491. 7 423. 2 387. 8	\$16, 464. 3, 667. 4, 834. 4, 133. 3, 840.
New dwelling units (housekeeping only) Northeast Northeast North Central South West Northeast Northeast Northeast North Central South West Additions, alterations, and repairs Northeast	124. 9 182. 3 226. 0	702. 6 141. 8 142. 4 206. 3 212. 0 317. 9 84. 4 74. 4 101. 1 58. 0 94. 8 19. 5 20. 6 31. 8	729, 4 141, 1 181, 0 194, 0 223, 3 389, 9 98, 9 117, 0 106, 5 72, 5 94, 3 20, 2 23, 5 26, 3 34, 2	830 1 167 0 237 9 205 8 218 3 358 3 96 0 117 8 102 6 82 0 108 7 23 4 28 4 29 0	881. 6 174. 7 268. 1 210. 7 228. 1 457. 0 96. 6 120. 8 144. 1 80. 6 120. 3 25. 7 37. 8 29. 2 27. 6	905. 0 185. 1 283. 1 225. 0 210. 8 408. 0 74. 6 110. 1 129. 5 03. 8 126. 1 36. 2 32. 1 31. 6	920. 6 210. 3 284. 1 214. 5 211. 8 470. 1 117. 9 154. 2 100. 6 97. 3 140. 5 31. 8 36. 8 32. 3	908. 3 204. 8 285. 5 203. 9 214. 0 455. 6 127. 9 134. 2 96. 8 94. 7 139. 9 34. 6 41. 2 37. 1 27. 1	966. 8 228. 6 306. 8 238. 0 485. 7 80. 4 137. 1 155. 0 113. 2 156. 0 35. 8 45. 0 43. 0	9, 854, 2, 187, 2, 905, 2, 340, 2, 451, 5, 005, 1, 148, 1, 363, 1, 007, 1, 468, 331, 404, 391,

i See table F-3, footnote 1.
Preliminary.

^{*} Revised.

* Includes new nonhousekeeping residential building, not shown separately.

TABLE F-5:—Building permit activity: Valuation, by metropolitan-nonmetropolitan location and State1

				1	Valuation (in millions	0			
State and location	1965				15	154				
	Jan.	Dec.	Nov.	Oet.	Sept.	Aug.	July	June	May	Annual total
All States. Metropolitan areas '	\$1, 124. 2	\$1, 226, 7	81, 345. 2	\$1, 471. 5	\$1, 446. 6	\$1, 539. 3	\$1, 519. 2	\$1, 649. 1	\$1, 426. 4	\$16, 464.1
	923. 8	1, 010, 2	1, 078. 8	1, 145. 9	1, 146. 9	1, 236. 8	1, 227. 9	1, 304. 2	1, 009. 7	13, 161.
	200. 7	216, 5	266. 4	325. 6	299. 7	302. 5	291. 3	344. 9	326. 7	3, 303.
A lebama A rizona A rizona A rizansia California Colorado	9.9 12.1 4.1 204.3 23.1	7.8 12.6 6.1 222.0 24.2	12.5 11.0 4.6 226.6 17.0	14. 2 16. 8 3. 8 214. 7 26. 8	12.7 10.9 6.0 220.1 22.9	13. 4 11. 3 5. 5 231. 7 26. 3	12. 3 12. 5 5. 1 231. 1 23. 3	12. 5 12. 8 7. 0 256. 5 24. 1	10. 9 11. 6 20. 5 200. 7 17. 4	135. 145. 77. 2, 571. 245.
Connecticut. Dela ware Dela ware Floritia. Georgia.	17. 1	21. 4	38. 2	28. 2	29. 9	81. 5	27. 4	36. 0	25. 0	320.
	2. 9	1. 5	2. 4	4. 5	4. 7	5. 0	5. 7	6. 9	4. 9	49.
	2. 3	9. 5	18. 6	3. 2	5. 3	2. 1	2. 9	9. 6	3. 9	72.
	87. 2	56. 7	55. 9	60. 7	58. 1	49. 9	87. 1	58. 6	54. 8	649.
	34. 7	20. 1	17. 9	18. 8	22. 4	21. 1	19. 8	49. 6	19. 0	267.
Idabo Illinois Illinois Illinois Iowa Kansat	.7 49.8 18.2 5.5 9.5	1. 4 70. 2 20. 0 7. 8 13. 8	3. 0 83. 5 26. 1 15. 2 24. 9	3. 2 87. 9 33. 0 12. 0 12. 9	3. 4 80. 2 27. 7 12. 9 12. 6	2.6 95.7 34.7 12.0 11.8	2.5 88.0 28.2 14.5 12.6	4.1 92.0 32.3 16.0 17.1	2.7 96.1 31.9 12.8 13.9	30. 985. 340. 141. 168.
Kentucky	27.1	8.6	11. 8	10. 4	12.7	12.3	12.3	19.8	18. 8	170.
Outsians		16.3	17. 4	17. 6	21.3	18.8	22.9	19.9	17. 2	216.
Marine		4.7	2. 7	2. 7	2.5	2.7	3.0	3.5	1. 8	30.
Maryland		30.9	32. 9	36. 8	38.1	87.1	34.4	41.7	28. 7	402.
Manuchusetts		27.7	36. 6	38. 6	25.5	36.0	38.5	35.0	30. 3	391.
Michigan Minneota. Minneota. Minneota. Minsterippi. Miasterippi. Miasteri	54.8	69. 7	68. 4	100, 8	86. 7	93.4	106. 8	100. 7	106. 2	1, 007.1
	12.8	25. 0	27. 8	34, 5	32. 2	40.4	33. 3	29. 3	32. 9	358.
	3.3	7. 7	4. 2	4, 8	5. 8	6.7	4. 1	6. 3	4. 0	62.
	19.0	29. 5	20. 6	22, 6	24. 9	26.6	22. 7	42. 1	22. 1	304.
	1.3	2. 9	3. 9	2, 9	3. 5	2.8	3. 5	5. 1	5. 4	39.
Netraska	8.2	4.8	8.1	7. 4	7.9	7. 0	6.3	9. 3	6.6	77.
New Idan	6.2	8.7	6.3	9. 1	4.0	5. 8	4.1	13. 3	9.9	82.
New Hampahire	.9	44	3.1	2. 2	1.7	2. 8	2.1	2. 9	2.2	27.
New Jersey	48.9	40.4	55.8	61. 2	80.7	80. 7	62.0	65. 7	62.7	686.
New Mexico	6.8	3.7	5.9	5. 8	7.3	5. 8	5.3	7. 0	4.9	72.
New York North Carolina North Dakota Ditio	96. 8	101. 8	100. 9	97. 7	111. 1	155. 8	161. 1	117. 8	113. 2	1, 412.1
	18. 8	12. 9	11. 5	12. 8	16. 1	19. 4	14. 4	16. 1	19. 2	181.6
	.3	1. 1	2. 2	3. 9	3. 6	2. 9	3. 8	3. 6	2. 7	29.8
	50. 1	65. 8	76. 0	82. 2	90. 9	104. 7	106. 2	95. 2	91. 5	985.1
	10. 4	8. 8	12. 8	11. 4	11. 9	14. 2	10. 0	13. 2	10. 7	137.4
Oregon Pennsylvania Ithode Island Gordina Gouth Dakota	8.3	9.7	10.7	13.9	16.0	17. 5	11. 7	18.3	11.9	151.
	60.4	44.1	45.8	63.8	62.7	67. 8	70. 9	79.6	70.7	734.
	3.4	2.1	3.8	3.1	2.7	3. 5	3. 2	5.6	3.7	44.
	6.1	5.9	5.4	5.1	6.3	6. 4	5. 3	5.7	5.6	67.
	1.1	1.8	3.0	2.8	2.8	6. 3	2. 9	3.0	3.3	32.
Cennoesee. Cenno. Cenno. Cinh Cermone. Cirginia.	18.9	13. 2	14. 5	20. 5	18. 5	16. 7	21. 9	32.1	14.5	200. 0
	83.8	87. 5	83. 3	92. 6	98. 3	79. 7	78. 5	81.9	60.9	946. 4
	3.1	4. 9	9. 0	16. 7	11. 1	10. 9	10. 2	10.8	7.8	105. 1
	.2	. 8	. 6	. 8	1. 4	2. 1	. 8	.3	.6	9. 1
	26.6	25. 9	30. 0	84. 2	46. 2	40. 1	32. 6	34.5	29.1	420. 1
Washington	27. 9	31. 2	37. 2	39. 3	35.6	27. 6	31. 9	83. 5	37.0	375. 3
West Viginia	2. 1	2. 6	4.0	11. 6	5.4	5. 8	7. 6	8. 2	4.6	65. 1
Wisconsin.	14. 2	23. 0	29. 9	35. 3	33.6	44. 5	40. 1	51. 0	40.0	401. 4
Wyorning	1. 1	1. 8	1. 8	2. 7	2.7	2. 1	2. 1	2. 1	1.8	23. 2

See table F-3, footnote 1.
 Preliminary.
 Revised.
 Comprised of 168 Standard Metropolitan Areas used in 1980 Census.

TAPLE F-6: Number of new permanent nonfarm dwelling units started, by ownership and location, and construction cost 1

										Estima	ted construe	tion cost
Period						Locati	ion *				n thousands	
	Total	Privately owned	Publicly owned	Metro- politan piaces	Nonmetro- politan places	North-	North Central	South	West	Total	Privately owned	Publicly owned
1950 4	1 904 000	1, 352, 200	43, 800	1, 021, 600	374, 400	m'	m	-	-	811,788,595	\$11,418,371	\$370, 23
1961	1,001,000	1, 020, 100	71, 200	776, 800	814, 500	8	83	8	8	9, 800, 892	9, 186, 123	614, 79
1952		1, 068, 500	88, 500	794, 900	332, 100	88	1 22	32	86	10, 206, 963	9, 706, 276	802, 70
1953		1, 068, 300	35, 500	803, 500	300, 300	(6)	52	32	522	10, 488, 008	10, 181, 185	306, 81
1954 4	1,100,500	1, 201, 700	18, 700	896, 900	323, 500	243, 100	325, 800	359, 700	291, 800	12, 478, 237	12, 309, 200	169, 03
1953: First quarter	257 100	238, 100	19, 000	184, 400	72, 700	240, 100	820, 500	839, 700	201, 600	2, 346, 213	2 183, 710	162, 50
January	22, 100	68, 200	3, 900	81, 300	20, 800	*******				641, 708	610, 344	31, 35
February	72, 100	73, 800	5, 400	56, 300	22, 900	8	52	33	8	720, 234	674, 399	45, 83
March	105 900	96, 100	9, 700	76, 800	29,000	222	8	52	8	984, 276	898, 967	85, 30
Second quarter	324, 300	315, 000	9, 200	228, 100	86, 200	(.)	(*)	(-)	(9)	3, 083, 256	3, 000, 120	83, 13
April		107, 400	4, 000	80, 400	81, 000	/B)	(1)	40		1, 057, 899	1, 022, 836	35, 06
May		105, 600	2, 700	81, 100	27, 200	8	8	88	8	1, 027, 221	1, 001, 698	25, 52
June		102,000	2, 600	76, 600	28,000	8	8	52	8	996, 136	975, 891	22, 54
Third quarter		280, 700	4, 300	207, 800	77, 200	(-)	(-)	(-)	(-)	2, 777, 607	2, 739, 208	36, 336
July		96, 400	300	71, 500	25, 200	(1)	(7)		/m	941, 943	938, 871	3, 073
August		92, 200	1,000	67, 300	25, 900	86	83	8	8	911, 681	902, 501	9, 186
September		92, 100	3,000	69, 900	26, 100	(6)	(6)	32	(6)	923, 963	897, 896	26, 067
Fourth quarter	237, 400	234, 500	2,900	173, 200	64, 200	(-)	(-)	(-)	(-)	2, 280, 927	2, 258, 087	22, 846
October		90, 100	(8)	63, 800	26, 300	10	19	(10)		883, 455	882, 838	617
November		79, 900	1, 600	59, 500	22,000	26	8	8	8	777, 479	764, 774	12, 704
December		64, 500	1, 300	49, 900	15, 900	28	28	22	75	619, 993	610, 475	9, 818
984: First quarter	236, 800	232, 200	4, 600	174, 300	62, 500	47, 400	52,700	77, 800	89, 100	2, 240, 448	2, 199, 446	41, 000
January	66, 400	65, 100	1, 300	49, 700	16,700	13, 000	13, 300	22, 500	17, 600	618, 313	605, 951	12, 365
February		73, 900	1, 300	53, 500	21, 700	13, 300	16, 200	26, 100	19, 600	701, 934	600, 700	11, 176
March	95, 200	98, 200	2,000	71, 100	24, 100	21, 100	23, 200	29, 000	21, 900	920, 201	902, 738	17, 466
Second quarter	332, 700	326, 500	6, 200	244, 000	88, 700	67, 200	98, 400	90, 900	76, 100	3, 454, 571	3, 306, 698	55, 673
April	107, 700	106, 500	1, 200	79, 400	28, 300	21, 700	81, 100	29, 300	25, 600	1, 105, 809	1, 095, 557	11, 262
	108, 500	107, 400	1, 100	77, 100	31, 400	21, 600	32, 900	20,000	24, 000	1, 137, 562	1, 128, 751	8, 811
June		112,600	3,900	87, 500	29,000	24,000	34, 400	31, 600	26, 500	1, 210, 200	1, 174, 590	35, 616
Third quarter	346,000	339, 300	6,700	252, 800	98, 200	72, 500	97, 800	99, 900	75, 800	3, 590, 366	3, 528, 471	61, 890
July	116,000	112,900	8, 100	87, 500	28, 500	25, 300	33, 300	32, 200	25, 200	1, 213, 311	1, 182, 830	30, 481
	114, 300	113, 000	1, 300	82, 600	31, 700	24, 800	33, 900	31, 700	25, 200	1, 186, 019	1, 175, 796	10, 252
	115, 700	113, 400	2, 300	82, 700	33, 000	22, 400	31, 900	26,000	25, 400	1, 191, 006	1, 169, 878	21, 161
Fourth quarter	304, 900	303, 700	1, 200	225, 900	79, 100	85, 900	76, 900	91, 300	80, 800	3, 192, 852	3, 182, 385	10, 467
	110, 700	110, 500	200	80, 400	30, 300	21, 500	30, 100	31, 800	27, 200	1, 160, 300	1, 156, 338	1, 963
November	103, 600	103, 300	300	75, 700	27, 900	19,000	26, 800	31, 500	26, 300	1, 083, 449	1,050,578	2, 871
December 8	90, 600	89, 900	700	69, 700	20, 900	15, 300	20,000	28, 000	27, 300	949, 103	943, 409	6, 604
December s	295, 000	292, 500	2,500	215, 900	79, 100	****	-, 000	an, 000	,	220, 100		0, 001
January 7	88, 000	87, 800	200	65, 600	23, 400	(1)	(0)	(9)	(9)	897, 157	895, 500	1, 597
January '	90,000	86, 600	1, 400	64, 800	25, 200	(9)	(6)	0	m	916, 550	903, 720	12, 830
March '	117,000	116, 100	900	85, 500	31, 500	(9)	m	26	8	(4)	(0)	(1)

¹ The data shown here do not include temporary units, conversions, dormitory accommodations, trailers, or military barracks. They do include prefabricated bousing, if permanent.

These estimates are based on (1) monthly building-permit reports (adjusted for lapsed permits and for lag between permit issuance and the start of construction), (2) continuous field surveys in nonpermit-issuing places, and (3) reports of public construction contract awards.

Beginning with January 1934 data, the estimating techniques for the privately owned segment of the housing starts series were revised to combine (1) a monthly reporting system expanded to include almost all building-permit-issuing localities (accounting for nearly 50 percent of total nonfarm population), with (2) a newly designed sample of counties that permits more efficient operations and a greater degree of accuracy than previously. The new series is continuous with statistics for earlier dates except that the urban and rural-nonfarm distribution shown previously is replaced by metropolitan-nonmetropolitan and regional estimates. Data on type of structure (1-family versus rental-type structures) are continued from the old to the new series, and are available on request.

The error in the total private nonfarm estimate due to sampling in the

nonpermit segment is such that for an estimate of 100,000 starts the chances are 19 out of 20 that a complete enumeration of all nonpermit areas would result in a total private nonfarm figure between 98,000 and 102,000. For metropolitan-nonmetropolitan or regional components, the relative error is somewhate and rural-nonfarm classification for periods before January 1964 are available upon request. Annual metropolitan-nonmetropolitan location data not available before 1995; monthly figures not available before 1995; regional data not available before January 1964.

Frivate construction costs are based on permit valuation, adjusted for understatement of costs shown on permit applications. Public construction costs are based on contract values or estimated construction costs for individual projects.

Housing peak year.

Housing peak year.

Revised.

Less than 50 units.

Preliminary.





New Publications Available

Bulletins for Sale

Order BLS Bulletins from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Send check or money order, payable to the Superintendent of Documents. Currency sent at sender's risk. Sales offices for BLS Bulletins are also maintained at three of the Bureau's Regional Offices: Mid-Atlantic, North Central, and Western. (See inside front cover for the addresses of these offices.)

- No. 1172-6: Occupational Wage Survey, Denver, Colo., December 1954.
 21 pp. 25 cents.
- No. 1172-7: Occupational Wage Survey, San Francisco-Oakland, Calif., January 1955. 22 pp. 20 cents.
- No. 1174: Injuries and Accident Causes in Warehousing Operations, 1950.

 January 1955. 52 pp. 40 cents.
- No. 1175: Union Wages and Hours: Building Trades, July 1, 1954. 44 pp. 30 cents.
- No. 1179: Factory Workers' Earnings: Distributions by Straight-Time Hourly Earnings, April 1954. March 1955. 33 pp. 25 cents.

For Limited Free Distribution

Single copies are furnished without cost as long as supplies permit. Write to Bureau of Labor Statistics, U. S. Department of Labor, Washington 25, D. C., or to the nearest Regional Office of the Bureau (for address of the appropriate Regional Office, see inside front cover).

- BLS Report No. 79: Case Study Data on Productivity and Factory Performance. Paint and Varnish. December 1954. 90 pp.
- BLS Report No. 81: Case Study Data on Productivity and Factory Performance. Copper Tube and Brass Rod. March 1955. 110 pp.
- Cost Savings Through Standardization, Simplification, Specialization in: Clothing Industry. 57 pp. Materials Handling Equipment. 125 pp. Containers. 42 pp.
- Union Conventions, 1955. National and International Unions and AFL and CIO State Labor Organizations. 9 pp.
- Foreign and International Labor Information. Methods Used in a Survey of Family Income, Expenditures, and Living Costs in Panama City, 1952. January 1955. 44 pp.

UNIVERSITY HIEROFILES ATT STEVENS RICE 313 NORTH FIRST STREET C R ANN ARBOR NAY MICH

UNITED STATES
GOVERNMENT PRINTING OFFICE
SYMBON OF PUBLIC DOCUMENTS
WASHINGTON 25, D. C.

OFFICIAL BUSINESS

PRINCET OF POSTAGE, 0000